Aalto University
School of Science
Degree Programme in Industrial Engineering and Management

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Conceptualization and Quantification of Customer Value in Industrial Selling

Master's thesis

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ABSTRACT OF THE
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Creating and delivering superior customer value is seen as a prerequisite for achieving competitive advantage. Commoditization, global sourcing, and professionalism in purchasing have lead suppliers to seek for ways to avoid price competition. Sales approaches that are based on value provide a way to shift the customers' focus from prices to business impacts, requiring the supplier to quantify and communicate the value creation potential of the offering to the customer. However, the literature on customer value does not provide suitable value constructs to support value quantification, establishing the research gap of this study. Thus, the aim of this thesis is to explore how customer value should be quantified in industrial selling and to conceptualize customer value as a measurable construct to make it suitable for quantification purposes.

A literature research is first conducted, discussing the existing theories regarding the characteristics of customer value and the various value dimensions and elements arising from the literature. Additionally, the background of using value in selling is studied, followed by discussion over procedures and tools that are used in quantifying customer value. A multiple case study including five large industrial case companies is conducted in order to replicate and validate the quantification-related findings of the literature research. One case company is additionally used for evaluating the value construct-related theoretical findings. Altogether six semi-structured interviews, several meetings, three group sessions, external interview materials, and other company documents were used as data for the empirical research.

This thesis proposes a new conceptualization of customer value, defining it as the perceived difference of benefits received and sacrifices made by the customer. Customer value is conceptualized as a two dimensional construct that combines the operational and strategic value dimensions. To make the practical implementation of the construct easier, the value elements are categorized as the economically measurable elements and the individually measurable value placeholder elements. The second major outcome of the research is a process description of how value should be quantified in industrial selling. The process consists of three parts: gaining customer understanding, assessing the value creation potential, and communicating value to the customer. The process description includes discussion over procedures, tools, potential challenges, and the practical implementation of the value construct.

The theoretical implications of the thesis include the new conceptualization of value and a formal survey for further validating the proposed value construct. On the other hand, the proposed value construct and the quantification process description can provide industrial managers with valuable ideas and guidelines for designing and developing value quantification processes and tools in practice. This thesis also recommends the detailed operationalization of customer value as an avenue for further research.

Keywords:	Publishing language:
Value, customer value, conceptualization, value element, value dimension, quantification, selling, business-to-business	English

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Ylivertaisen asiakasarvon luomista ja toimittamista pidetään edellytyksenä kilpailuedun saavuttamiseksi. Hyödykkeellistäminen, globaali kilpailutus ja ammattimainen hankinta ovat johtaneet toimittajien tarpeeseen löytää keinoja hintakilpailun välttämiseksi. Asiakasarvoon pohjautuvat myyntitavat toimivat tehokkaana keinona siirtää asiakkaan mielenkiinto hinnoista kohti liiketoiminnallisia vaikutuksia. Tämä vaatii kuitenkin toimittajan arvonluontipotentiaalin laskemista ja kommunikointia asiakkaalle. Asiakasarvoa koskevasta kirjallisuudesta ei kuitenkaan löydy asiakasarvon laskemiseen sopivaa käsitettä, vahvistaen tämän työn tutkimusongelman. Tämä tutkimus tutkii kuinka asiakasarvoa tulisi laskea teollisessa myynnissä ja kuinka asiakasarvo voitaisiin käsitteellistää, jotta se olisi mitattavissa ja sopisi arvon laskemiseen.

Tutkimus alkaa kirjallisuustutkimuksella, jossa käsitellään olemassa olevia teorioita asiakasarvon luonteenpiirteistä sekä sen ulottuvuuksista ja niiden osatekijöistä. Lisäksi kirjallisuustutkimus käsittelee arvoon perustuvan myynnin taustaa sekä asiakasarvon laskemisessa tyypillisesti sovellettavia käytäntöjä ja työkaluja. Empiirinen tutkimus puolestaan toteutetaan viisi suurta teollisuusyritystä sisältävänä tapaustutkimuksena, jossa pyritään toistamaan ja todentamaan kirjallisuustutkimuksessa tehtyjä asiakasarvon laskemiseen liittyviä löydöksiä. Lisäksi yhtä kohdeyritystä käytetään asiakasarvon rakenteeseen liittyvien teoreettisten löydösten arviointiin. Kokonaisuudessaan empiirisen tutkimuksen tekemisessä hyödynnettiin kuutta puoli-strukturoitua haastattelua, useita tapaamisia, kolmea ryhmätapaamista, ulkoista haastattelumateriaalia sekä muita yritysten dokumentteja.

Tämä tutkimus esittää uuden asiakasarvon käsitteen, jonka mukaan arvo on asiakkaan kokemien hyötyjen ja uhrausten havaittu ero. Asiakasarvon määritellään jakautuvan operatiiviseen ja strategiseen arvon ulottuvuuteen. Jotta asiakasarvon käsitteen käytännön implementointi olisi helpompaa, arvon osatekijät kategorisoidaan tutkimuksessa helposti taloudellisesti mitattaviin osatekijöihin sekä muihin erikseen mitattaviin osatekijöihin. Toisena suurena tuloksena tutkimus esittää myös kuvauksen asiakasarvon laskentaprosessista, joka sisältää keskustelua käytännöistä, työkaluista, potentiaalisista haasteista sekä asiakasarvon teoreettisen rakenteen soveltamisesta käytännössä. Prosessi koostuu kolmesta osasta: asiakasymmärryksen saavuttamisesta, arvonluontipotentiaalin arvioimisesta sekä arvon kommunikoimisesta asiakkaalle.

Tutkimuksen on selkeä teoreettinen merkitys, sillä se luo uutta teoriaa asiakasarvon rakenteesta synnyttäen näin keskustelua sekä luoden aihetta jatkotutkimukselle. Lisäksi tutkimus tarjoaa tuleville tutkimuksille kyselyrungon asiakasarvon käsitteen tarkempaa tutkimista varten. Tutkimus on myös merkityksekäs teollisille yrityksille sillä sen esittämä uusi asiakasarvon käsite sekä laskentaprosessin kuvaus tarjoavat yrityksille arvokkaita ideoita ja ohjenuoria laskentaprosessien ja -työkalujen käytännön suunnittelua sekä kehittämistä varten. Tutkimus myös ehdottaa asiakasarvon yksityiskohtaisempaa operationalisointia jatkotutkimuksen aiheeksi.

Asiasanat:	**Julkaisukieli:**
Value, customer value, conceptualization, value element, value dimension, quantification, selling, business-to-business	englanti

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Working on this thesis has required a lot of time and effort. It has also taught me lessons about efficient working and self-motivation methods. While I was sitting here and thinking about the people I wish to acknowledge, I could not help but wonder how many individuals have had some kind of a role in writing this report. Therefore, I wish to thank everyone who has helped me along this process. Your support has been priceless.

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Tuomas Hervonen
Espoo, August 26th 2014

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Definition of Key Terms

Benefit = something a customer receives when acquiring and using a supplier's offering (Zeithaml, 1988)

Business markets = firms, institutions, or governments that acquire goods and services either to their own use or for resale (Anderson and Narus, 2004)

Customer desired value = the value customers want to receive from products or services and their providers (Flint and Woodruff, 2001)

Customer perceived value = the difference between customer desired value and total customer sacrifice, reflects the incentive the customer has for purchasing. Also equivalent to "Net customer value" or "Customer value" (Töytäri et al., 2011)

Customer process innovation = thoroughly analysing customer's processes to identify ways to improve them, and replace them if needed. This analysis leads to changes in the processes that lead to improvements in the customer's bottom line (Kaario et al., 2003)

Commoditization = a tactic of buyers eliminating or downplaying any points of difference between the value elements of competing offerings (Anderson and Narus, 2004)

The Fundamental Value Equation = Value f – Price f > Value a – Price a (Anderson and Narus, 1998)

Point of difference = elements of value that are believed to have difference between two offerings (Anderson and Narus, 1998)

Point of parity = elements of value that are believed to have no difference between two offerings (Anderson and Narus, 1998)

Purchasing = the process of acquiring resources and capabilities for the firm from outside providers (Anderson and Narus, 2004)

Sacrifice = something a customer gives when acquiring and using a supplier's offering (Zeithaml, 1988)

Servitization = the movement of firms increasingly offering fuller market packages or "bundles" of customer-focussed combinations of goods, services,

support, self-service, and knowledge, with services beginning to dominate (Vandermerwe and Rada, 1988)

Solution = a combination of products, services and information (Kaario et al., 2003)

Total cost of ownership = the sum of the purchase price plus all expenses incurred during the productive lifetime of a product or service minus its salvage or resale price (Anderson and Narus, 2004, p. 103)

Value assessment = the process of defining the customer's value elements and preferences, and obtaining an estimate of what it's worth to fulfil them in monetary terms (Anderson and Narus, 2004)

Value-based selling = a selling behaviour that is based on the creation of customer value (Terho et al., 2012). Is used to describe value-focusing sales activity

Value dimension = value comprises of different dimensions of benefits and sacrifices, such as economic, technical, service, and social (Töytäri and Rajala, 2014)

Value element = value elements are smaller and more tangible sources of benefits or sacrifices for the customer (Töytäri and Rajala, 2014)

Value network = the network of organizations that perform portions of business processes to create benefits on different value dimensions and then share those benefits (Anderson and Narus, 2004)

Value placeholder = value elements where measurement is either too difficult or too costly (Anderson and Narus, 1998)

Value proposition = a statement of benefits offered to a customer group and the price a customer will pay (Ballantyne et al., 2011)

Value quantification = calculating the business impact of an offering to the customer both in terms of effects on the customer's income statement and the balance sheet (Kaario et al., 2003)

1. Introduction

1.1 Background

The commoditization of industries is changing the way suppliers are developing their sales strategies (Woodruff, 1997). Traditional product or service selling is usually reactive by nature as it consists of an offering that fulfils the customer's already existing need, leading to the decision making to be based on the selling price or total costs of the offering. This means that the customers have increased buying power over the suppliers through commoditization and global sourcing (Matthyssens and Vandenbempt, 2008). The next generation of selling focuses upstream in the customer's business processes and aims at selling value to the customers. It emphasizes the total value of ownership (TVO) rather than just the price or even total costs of ownership (TCO). The life-cycle costs of an offering can often be quantified, and are thus relatively easy for the purchasing organization to use when comparing offerings of competing suppliers. In a value-based selling approach, the customer perceived value is used as the pricing reference, instead of the supplier's costs or market prices (Töytäri and Rajala, 2014). Being able to quantify and provide evidence of the supplier's value creation potential are essential in a sales approach of this kind (Anderson and Narus, 1998).

It is however difficult to quantify value because the concept of value is not easily defined and the amount of value possessed by an offering depends on what the customer perceives as value. The concept of value and its role in business-to-business selling has been increasingly studied by marketing researchers and practitioners during the last two decades (Eggert and Ulaga, 2002; Ravald and Grönroos, 1996; Terho et al., 2012; Walter et al., 2001). Studying value is becoming significantly more important both in research and practice, as even the American Marketing Association revised its definition of marketing to include the notion of customer value (Graf and Maas, 2008). Researchers have pointed out that understanding value and customer value

creation can play a great role in companies achieving competitive advantage (Woodruff 1997; Anderson & Narus 2004). The widespread agreement is that the creation of superior customer value is the basis for a firm's long-term survival and growth (Slater, 1997; Terho et al., 2012; Woodruff, 1997). The latest trend in the research of customer value is the exploration of the aspects of value co-creation by stressing the active role of the customer (Terho et al., 2012). The value-based selling approach has also been under a lot of research during the last years (Töytäri et al. 2011; Töytäri & Rajala 2014).

1.2 Research problem and objectives

There have been several calls for further research on the subjects of customer value and value-based selling. The literature on customer value includes multiple definitions and conceptualizations of value. None of them has, thus far, included a sufficient conceptualization that would be suitable for value quantification in business-to-business selling (Smith & Colgate 2007). Conceptualizing value into quantifiable dimensions and elements can help sales organizations understand customer value better and develop improved value-based selling tools.

Drawing from the described research gap, the objective of this study is to provide answers to the problem of how to conceptualize the value construct for quantification purposes in industrial selling. Furthermore, the practices of value quantification need to be explored as they provide the context for utilizing the value construct in practice. Therefore, an understanding of value quantification needs to be obtained. By transferring the aforementioned objectives into questions, we obtain the following research questions for the thesis:

1. How should customer value be defined and conceptualized for it to be a measurable construct in industrial selling?

2. How should customer value be quantified in industrial selling?

The two research questions crystalize the focus of this thesis. The answer to the first question provides a proposition for how to conceptualize value, but it also includes evaluation of using the construct in a practical context. The conceptualization of the value construct is highly based on theoretical knowledge, but the evaluation of its usefulness in quantification can only be determined by empirical research.

The second question is highly related to using the value construct for quantification in industrial selling. In order to evaluate the value constructs measurability and suitability for quantification, different aspects of quantification must be understood. Answering the second research question requires combining theoretical and empirical information over what processes and tools industrial companies have for quantifying value and what kind of challenges they have faced. Identification of the most important challenges is a prerequisite for overcoming them, and thus important for being able to answer the second research question.

Answering the two research questions provides a description of how value should be quantified in business markets, including discussion and recommendations over executing the quantification process and developing tools to quantify and communicate value. Thus, the findings of the thesis provide companies with valuable information concerning the design and implementation of value quantification in selling.

1.3 Research design

This study is a part of the Future Industrial Services (FUTIS) research program owned by the Finnish Metals and Engineering Competence Cluster (FIMECC). The program promotes the adoption and expansion of service business in technology-based industrial firms (FIMECC, 2014). Previous research about topics such as customer value and value-based selling has been conducted in the program, and thus, the current study builds on the knowledge cumulated through the program. This approach explains having similarities in references between the current study and the previous research.

The current research consists of two methodologies to answer to the selected research questions: a literature research and a qualitative research.

1.3.1 Literature research

The literature research starts by creating a better understanding of how customer value has previously been defined and conceptualized. This understanding is important in order to create a new conceptualization of value. A recent FUTIS research program-related article (Töytäri and Rajala, 2014) provides an interesting conceptualization that builds on the previous literature. The value dimensions and elements proposed by Töytäri and Rajala (2014) are used as a basis in this thesis for refining and integrating several value constructs. The first part of the literature research is exploratory by nature, as it strives to create a new conceptualization of customer value that can be applied to the offer-

ing of any given industrial organization. The second part of the literature research studies the literature on how customer value can be quantified and what challenges the practical quantification of customer value entails. By understanding the practical aspects of value quantification, the measurability of the proposed value construct can be better evaluated.

The literature research is conducted by a thorough search of articles and other literature through three main databases: Ebsco business source complete, Proquest abi inform, and Google scholar. The most relevant search topics and key words were “Selling”, “Value”, “Business-to-business selling”, “Value-based selling”, “Value Selling”, “Value conceptualization”, “Value quantification”, and “Customer value”. The search of the literature was conducted in two waves. Initially approximately thirty articles were found through key word and topic searches in the databases. Another thirty articles were identified to be relevant based on the articles found during the initial literature search. After this, the literature searches were conducted based on the identified needs to close information gaps. The literature research focuses mostly on articles published in journals, as they are the primary medium to communicate scholarly knowledge in marketing (Baumgartner and Pieters, 2003). Approximately 53 % of the articles used in the literature research are found in the four most used journals, namely Industrial Marketing Management, Journal of Marketing, Journal of Business-to-Business Marketing, and Journal of Business and Industrial Marketing. The article distribution by journal is presented in figure 1. Altogether 58 articles and 12 books were used as the references of the thesis.

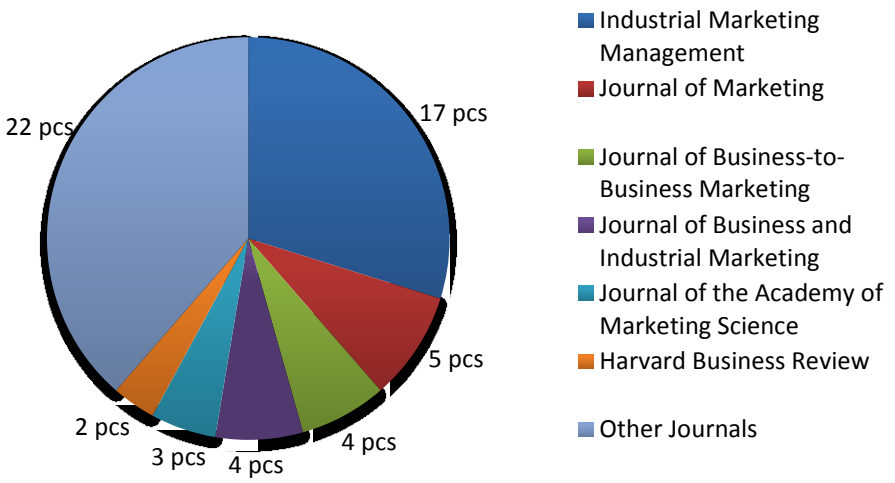

Figure 1 the article distribution by journal

1.3.2 Qualitative research

The qualitative empirical study explores the practices of value quantification in industrial case companies through the experiences of individual employees. At the request of the case companies, the case studies are conducted confidentially. For this reason any details impending to reveal the identity of the case companies or the interviewees are left unmentioned.

The qualitative research approach is chosen as it enables a more dynamic and evolving nature of the study (Strauss and Corbin, 2008). The qualitative research is conducted as a multiple case study, which is an effective method for discovering in-depth information (Yin, 2009) from multiple companies with differing industries. The research aims to discover insights about what kind of processes and tools are used for value quantification, and what the most important practical considerations are in utilizing the value construct in selling. The nature of the research is thus exploratory.

The qualitative research of the thesis comprises of five case companies. Six individual 90 minute interviews with case company A representatives are conducted, in addition to analysing documents and observations from meetings with company A representatives. Additionally, observations from three group sessions facilitated by company A are collected and analysed. Each session is held between company A and another case company, and includes several representatives from each of the participating companies. The group sessions act as the main data collection method for case companies B, C, and D. Finally, external interview data from case company E is also used to provide more empirical evidence for the study.

1.4 Scope and limitations

The scope of the literature research is on the conceptualization and quantification of customer value in industrial selling. Both the academic and practitioner literature on value provide multiple approaches for studying value in consumer and business markets. In this study, the dyadic perspective to value is chosen as it allows us to study the suppliers' perception of customer value, how it is created, quantified, and communicated, and what is of value to the customer (Terho et al., 2012). Therefore, the scope of the literature research is on customer value, but also includes articles concerning the topics of supplier value and value capture.

The scope of the empirical research is limited to studying five industrial companies that have operations in Finland. Each company has thousands of employees globally. The five case companies operate in different industries,

and thus, provide a broader view of value quantification practices. As all the cases are large industrial companies, they limit the generalizability of the findings within that context. In order to acquire the most relevant information on how customer value could be quantified in the context of selling, the focus of the research is set on the sales organizations of the industrial companies.

The empirical data collection is limited to six interviews, several meetings with a contact person from company A, company A internal documents, three group sessions with case companies B, C, and D, the material collected from approximately 20 interviews from company E, and company web sites. The data collection methods limit to the generalizability of the findings, as the data from different cases is not collected in a similar manner.

All of the company A interviewees have a relevant background in either the practical use or development of the value quantification practices of the company. In order to create a culturally and geographically diverse sample, the interviewees are selected from five different countries, including the United Kingdom, Italy, India, Hong Kong in China, and Finland. The scope of these interviews is on the value-based selling and value quantification practices and tools. Additionally, the characteristics and elements of customer value are discussed.

The group sessions are limited to only include Finnish employees of the companies due to geographical distances. This creates a limitation as having representatives from various countries could reveal a cultural bias for example. The scope of the group sessions is on discussing the methods, tools and challenges of value quantification in selling.

As mentioned before, an evaluation of the validity and measurability of the proposed value construct is based on the interviews conducted in company A. The validation of the proposed value construct would ideally require a quantitative research, for which the time allocated for the completion of the thesis is not sufficient. Thus, the validation method is not optimal and limits the generalizability of the results. Nevertheless, a formal survey is designed and proposed for future research and testing of the value construct.

1.5 Structure of the thesis

The thesis is structured in four distinct parts: introduction, theoretical research, empirical research, and discussion and conclusions.

The introduction has thus far included the background of the study, the research problems, questions, and objectives, and the research methodology,

scope, and limitations. This subchapter ends the introduction part of the thesis by summarizing the structure of the report.

The theoretical research of the thesis begins in chapter two by discussing the multiple characteristics of value, followed by an overview of different key elements of value constructs arising from the literature. Based on previous research an integrated value construct is conceptualized and its dimensions and elements are presented. Chapter three discusses value creation, the role of value in selling, and different value quantification procedures, tools, and challenges.

Chapter four starts the empirical research by introducing the research methodology, the research approach, data collection, and analysis methods. The formulation of a formal survey for validating the proposed value construct is also discussed and the survey is presented. Key findings from each case company are structured and discussed in chapter five. The measurability and quantification suitability of the proposed value construct is also discussed in this chapter, providing the answer to the first research question. Finally, chapter six presents a synthesis of the research findings and answers the second research question.

Chapter seven consists of the discussion and conclusions concerning the thesis. First, a short summary of the research is presented, followed by the theoretical and managerial implications of the thesis. Finally, the limitations of the research are discussed and the recommendations for further research are presented. The structure of the thesis is presented in figure 2.

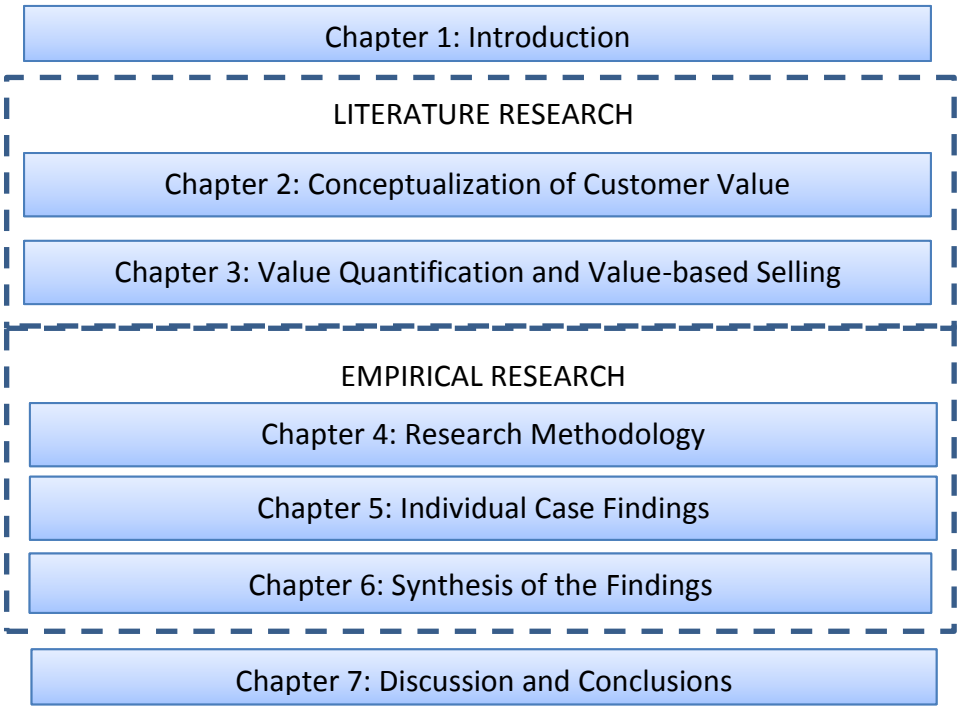

Figure 2 the structure of the thesis

2. Conceptualization of Customer Value

2.1 The role and importance of customer value

Customer value has been claimed to be the cornerstone of the marketing management process in business markets (Anderson and Narus, 2004). Furthermore, many researchers have claimed that creating and delivering superior customer value is a prerequisite for suppliers to achieve competitive advantage, as it leads to long-term business relationships and success through customer satisfaction, loyalty, and retention (Khalifa, 2004; Ravald and Grönroos, 1996; Töytäri et al., 2011; Woodruff, 1997; Yang and Peterson, 2004). The importance of value as a research subject is also magnified by its all-embracing nature. Value concerns everyone from consumers to business markets and from personal to organizational level. Value is also the essential part of exchanges between companies in business markets. Value exchange and business take place in order to create value for all the parties of the relationship (Walter et al. 2001; Töytäri & Rajala 2014). Some researchers (Brandenburger and Stuart, 1996) propose that value is created in vertical chains in which companies procure resources, such as capital, labour, and raw materials, use them to make products and services, and then sell them to their customers. In reality value creation is much more complex. For example, according to the co-creation view, value is not created in the manufacturing process and then exchanged, but instead value is seen to emerge through the consumption of the suppliers offering in the customer's value-generating processes, creating value-in-use (Grönroos, 2008; Terho et al., 2012; Vargo and Lusch, 2004). Thus, value can be created but it can also be co-created.

Value is an increasingly relevant concept, but according to Lindgreen and Wynstra (2005) many firms often cannot define or measure it. In order to create and sell superior customer value, companies need to first understand what customer value consists of (Anderson and Narus, 1998). Up until today, research in the field of marketing has provided us with multiple conceptualizations of value. None of these conceptualizations has been generally accepted as being completely accurate (Ulaga and Eggert, 2005), for the reasons that they

do not examine the construct deep enough or that they do not take all aspects of value in consideration.

Some researchers focus more on the transactional aspects of value (Zeithaml 1988; Sweeney & Soutar 2001; Heinonen 2004; Monroe 1990), some stress the relational focus of value creation (Möller and Törrönen, 2003; Ritter and Walter, 2012; Wilson and Jantrania, 1994), and others consider both (Lapierre, 2000; Ravald and Grönroos, 1996; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005). In some cases the conceptualizations also include terminology that is not sufficiently explained, leaving the construct ambiguous. For example, Ramsay (2005) argues that a clear line should be drawn between potential value and realized value. In the context of selling, and this thesis, customer value relates highly to the potential value that a supplier plans to create to a customer in order to make the sale. Additionally, the concepts of value and customer value differ in terms of specifying who is enjoying the value. Value can be created and shared between the customers and the suppliers (Brandenburger and Stuart, 1996), but customer value takes the perspective of the customer organization, considering what they want and believe that they can get from buying and using a seller's product (Woodruff, 1997). Similarly, customer perceived value, or net customer value, is defined as the perceived net value considering all benefits and sacrifices that concern the customer (Töytäri et al., 2011). All of the controversy in discussing value is understandable as it relates highly to the several characteristics of customer value. These characteristics are explored next.

2.2 Characteristics of customer value

In 1961 Lawrence Miles explained that in many cases value can mean something completely different to a manufacturer than to a customer, and that a given artefact can have a different value to the customer depending on the time, the place, and its use (Wilson and Jantrania, 1994). This definition gives us a good idea of the complexity of the concept. Value is a complicated concept (Ravald and Grönroos, 1996), but it can be broken down to its main characteristics to make it easier to understand.

Customer value is customer-oriented

The actual value that an offering can provide to a customer is determined by the customer and not the supplier (Töytäri et al., 2011; Woodruff, 1997). Thus, when selling to a customer, the supplier has to find out what is actually valuable to the specific customer instead of presenting what is valuable from their

perspective. In addition to creating value for the supplier, the offering has to create value for the customer as well for the customer to be interested in acquiring it (Töytäri and Rajala, 2014; Walter et al., 2001). This makes the customer-oriented nature of value extremely important for companies in business markets.

Value is subjective

Value is always determined individually and is based on each individual's perceptions, observations, preferences, and judgement (Eggert and Ulaga, 2002; Holbrook, 1996; Ravald and Grönroos, 1996; Töytäri and Rajala, 2014; Töytäri et al., 2011; Vargo and Lusch, 2004; Zeithaml, 1988). This makes value subjective and puts the emphasis of selling on networking within the customer organization, finding the decision makers, and making them see and believe the value by communicating with them in their own terms. For a CFO this might mean presenting the financial value of the offering, whereas a quality manager might be interested in value created with the quality and design aspects of the offering.

Value is multifaceted

Value can constitute several dimensions, each of which consists of multiple elements (Ravald and Grönroos, 1996; Töytäri and Rajala, 2014). The dimensions of value relate to differing subjects, such as functional or behavioural, transactional or relational, operational or strategic. These different dimensions include several elements or sources of value that have a mutual subject area, such as behavioural value, for example. The dimension of behavioural value, according to Wilson and Jantrania (1994), consists of value elements such as social bonding, trust, and culture. The conceptualization of value helps companies in business markets understand what value consists of, thus enabling a more systematic approach in establishing the value of a given offering or a relationship.

Value is situational and dynamic

Just like value depends on individual or company-specific perceptions, value is also highly determined by the situation the individual or the organization is in (Holbrook, 1996; Ravald and Grönroos, 1996). This means that from the perspective of a customer, the same offering can have a different sum of value depending on the time, the place, the use of the offering (Holbrook, 1996; Woodruff, 1997), and the competition (Anderson and Narus, 1998; Eggert and Ulaga, 2002). Furthermore, when any of these factors change, the value of the offering changes in the eyes of the customer (Flint and Woodruff, 2001). When

this happens, the supplier needs to react faster than their competition in order to sustain the business relationship or create a new one (Flint et al., 1997). This makes value situational and dynamic in nature (Eggert et al., 2005; Töytäri et al., 2011). These characteristics are understandable as a customer's current and future needs are highly dependent on time and place. If a supplier's component is not available at the time the customer needs it at their factory to manufacture a product, the customer might lose business to its competitor, and thus, not have a need for the component at a later time. The same applies if the component is not located at the right place, being the factory in this example. On the other hand, if a company has a monopoly position in the market, meaning that there is no competition, its offerings have significant value for those who need them. In the case that several well performing competitors would occur in the market, the original company would have lost its unique position among its customers. Supporting this logic, Flint and Woodruff (2001) propose that the change of value is mainly driven by two factors: the changes inside the supplier's organization and the changes in what their customers' demand.

Value varies by life span

On one hand value can be brief, and on the other it can be long lasting (Töytäri and Rajala, 2014). Short-term value can be, for example, transaction-related or caused by a single, specific episode that creates value, such as a meeting with a supplier creating positive emotions and motivation in a decision maker. Long-term value, on the other hand, can be created by sustainable and continuous cooperation that builds trust between the cooperative parties (Ravald and Grönroos, 1996). In this case the value can be created for example by reducing relationship governance costs by decreasing excess bureaucracy in continuous cooperation between the organizations. Cooperation can also help develop new capabilities that can affect the businesses' competitive advantage and strategic position in the markets. Ultimately, it is not easy to set a clear line between what is short-term and what is long-term value.

Value is causal and interconnected

Value is not only varying by life span but also by its extent. Value can be very individual, it can affect a specific team of people, or it can have organization-wide effects. This nature of value can be explained by causality. Value is always caused by some episode or interaction (Holbrook, 1996; Woodruff, 1997). These episodes or interactions can be called the antecedents of value. In addition to value being caused by its antecedents, value can also have further effects which cause further value or different kind of value. As an example of this

process, when a company buys a component that has improved reliability and consistency, it can result in less defected products reducing costs directly. On the other hand the reduction of defected products can result in less returned products from customers, which can affect customer satisfaction and perhaps finally the overall image of the company as a producer of high quality products. All of these effects create different kinds of value for the customer company. Thus, different kinds of value can be linked to each other through a process or causality (Woodruff, 1997). The further we follow the causalities, the harder it is to verify whether the effects occur or not. This is an important notion when considering selling value to customers and trying to provide evidence over the value creation potential of the offering.

The aforementioned characteristics of value reinforce the argument that value is complicated. Similarly, the value constructs arising from literature are vastly differing. However, many researchers have reached a consensus about value consisting of a trade-off between what a customer has to give and what they receive in exchange (Eggert and Ulaga, 2002; Flint et al., 1997; Lapierre, 2000; Ravald and Grönroos, 1996; Woodruff, 1997; Zeithaml, 1988). Zeithaml (1988) created this view by stating that value consists of the benefits a customer receives and the sacrifices a customer makes when acquiring and using an offering. As value is multifaceted, these benefits and sacrifices can be divided into different dimensions and broken down to individual value elements. These dimensions and elements constitute a value construct.

2.3 Existing value constructs and their dimensions

Value literature consists of multiple value constructs that have either a theoretical or an empirical background. There are several similarities to these constructs that are worth discussing. These similarities and the various value dimensions of literature are presented in table 1 in the end of this subchapter.

Relationship-related dimensions
Many authors present relationship-related elements of value as a separate dimension as a contrast to the value created by transactions or shorter lasting episodes within the business relationship. Ravald and Grönroos (1996) argue that value consists of separate episode- and relationship-related benefits and sacrifices. Lapierre (2000) presents a clear dimension of relationship-value elements, such as the image, trust, and solidarity benefits. Ulaga and Chacour (2001) have named the relationship dimension as the promotion-related value, also similarly including corporate image, personal and public relations, and

reliability of the company, among a few other elements. Some authors (Möller and Törrönen, 2003; Ritter and Walter, 2012) have approached customer value entirely from the relationship perspective, presenting different functions through which suppliers create value to their customers. In these constructs all value is understood to be created through the relationship.

Operation-related dimensions

Value is often divided into practical and abstract value dimensions, such as the operational or psychological value dimensions. The most common operation-related dimensions are the product- and service-related value dimensions which are identified by many authors (Lapierre, 2000; Monroe, 1990; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005). These dimensions include elements such as product characteristics, alternative solutions, and customization (Gwinner et al., 1998; Lapierre, 2000; Ulaga and Chacour, 2001), quality (Lapierre, 2000; Ritter and Walter, 2012; Ulaga and Eggert, 2005; Zeithaml, 1988), technical competence and support (Lapierre, 2000; Monroe, 1990; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005), reliability, consistency, responsiveness, and flexibility of services (Lapierre, 2000; Ulaga and Chacour, 2001). Ritter and Walter (2012) and Töytäri and Rajala (2014) each propose an entire dimension that consists of purely operation-related value. However, they define value on a higher level by including all elements that produce operational efficiency. These elements include the supplier's safeguard and volume functions (Möller and Törrönen, 2003; Ritter and Walter, 2012), for example.

Change-related dimensions

As a contrast to the operation-related dimension, Ritter and Walter (2012) also propose a change-related dimension that relates to more abstract value. Strategic or change-related value dimensions consist of elements such as core competencies, strategic fit, and organizational goals (Wilson and Jantrania, 1994), innovation, access to resources and information (Möller and Törrönen, 2003; Ritter and Walter, 2012; Ulaga and Chacour, 2001), time-to-market (Ulaga and Eggert, 2005; Wilson and Jantrania, 1994), and safety, security, and continuity (Ravald and Grönroos, 1996).

Psychological or behavioural dimensions

In addition to operation- and change-related dimensions of value, several authors have identified the behavioural aspects of value to be significant as well. Most commonly appearing elements are person- or organization-related social and symbolic elements (Gwinner et al., 1998; Töytäri and Rajala, 2014; Ulaga

and Eggert, 2005), such as friendship, personal relationships and social bonding (Gwinner et al., 1998; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005; Wilson and Jantrania, 1994), corporate image and market signals (Lapierre, 2000; Möller and Törrönen, 2003; Ulaga and Chacour, 2001), and solidarity (Lapierre, 2000). Trust is also a commonly identified behavioural value element (Gwinner et al., 1998; Lapierre, 2000; Wilson and Jantrania, 1994). It is a significant part of business relationships and their quality (Walter et al., 2003), and thus very important for value creation as well.

Economic dimensions

Some authors also include economic value in their constructs as a benefit dimension (Anderson et al., 1993; Gwinner et al., 1998; Möller and Törrönen, 2003; Ritter and Walter, 2012; Wilson and Jantrania, 1994). In these cases the authors have argued that value can be created through economic efficiency or cost reductions. This is exceptional as the economic dimension is often times the only sacrifice dimension, consisting of the purchase price and other life-cycle costs, such as acquisition costs, transportation costs, installation costs, order handling costs, repair and maintenance costs, and other operations costs (Anderson et al., 1993; Lapierre, 2000; Menon et al., 2005; Ravald and Grönroos, 1996; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005; Zeithaml, 1988). It is arguable whether reducing sacrifices, such as costs, can be referred to as creating benefits. In this study costs are considered as sacrifices, and reducing them creates value by reducing the amount of sacrifices a customer has to make.

Other sacrifice elements

In addition to life-cycle costs, in some constructs additional sacrifice elements are identified as well. Time, energy, and effort either invested in the relationship or in obtaining and operating the supplier's offering are identified by many as sacrifice elements (Lapierre, 2000; Ravald and Grönroos, 1996; Zeithaml, 1988). Lapierre (2000) also identifies conflicts between suppliers and customers as sacrifices. The risks relating to the relationship, failures, or poor performance (Kothandaraman and Wilson, 2001; Monroe, 1990; Töytäri and Rajala, 2014) are also mentioned in the literature. Ritter and Walter (2012) identify change-related sacrifices to also include the erosion of own capabilities, reluctance to adopt inputs, limited integration capability, and competitors' access to similar resources. Finally, some constructs have not identified sacrifices as separate dimensions (Gwinner et al., 1998; Möller and Törrönen, 2003; Wilson and Jantrania, 1994).

Table 1 various conceptualizations of customer value

Author	Benefit dimensions	Sacrifice dimensions
Zeithaml (1988)	- Salient intrinsic attributes - Extrinsic attributes - Perceived quality - Other high level abstractions (convenience, appreciation)	- Monetary price - Non-monetary prices (Time, Energy, Effort)
Monroe (1990)	- Physical attributes - Service attributes - Technical support	- Life-cycle costs - Risks
Anderson et al. (1993)	- Economic (net benefits) - Technical (net benefits) - Service (net benefits) - Social (net benefits)	- Purchase price
Wilson and Jantrania (1994)	- Economic benefits - Strategic benefits - Behavioural benefits	- None
Ravald and Grönroos (1996)	- Episode benefits - Relationship benefits	- Episode - Relationship
Gwinner et al. (1998)	- Confidence benefits - Social benefits - Special treatment benefits	- None
Lapierre (2000)	- Product-related benefits - Service-related benefits - Relationship-related benefits	- Purchase price - Relationship-related sacrifices
Ulaga and Chacour (2001)	- Product-related benefits - Service-related benefits - Promotion-related benefits	- Price-related sacrifices
Möller and Törrönen (2003)	- Supplier-efficiency function - Supplier-effectiveness function - Supplier-network function	- None
Menon et al. (2005)	- Core benefits - Add-on benefits	- Purchase price - Acquisition price - Operations cost
Ulaga and Eggert (2005)	- Product quality benefits - Service quality benefits - Supplier know-how benefits - Time-to-market benefits - Social benefits	- Purchase price - Process costs
Ritter and Walter (2012)	- Payment (operation-related) - Volume (operation-related) - Quality (operation-related) - Safeguard (operation-related) - Innovation (change-related) - Information (change-related) - Access (change-related) - Motivation (change-related)	- Erosion of own capabilities (change-related) - Reluctance to adopt inputs (change-related) - Limited integration capacity (change-related) - Competitors' access to similar resources (change-related)
Töytäri and Rajala (2014)	- Operational benefits - Strategic benefits - Social benefits - Symbolic benefits	- Operational sacrifices - Strategic sacrifices - Social sacrifices - Symbolic sacrifices

2.4 Reconceptualization of customer value

By examining the value constructs of the literature, it is noticeable that the constructs have evolved to include more comprehensive dimensions and elements of value. However, none of the previous constructs were designed for quantification purposes and are not well suited for operationalization (Smith and Colgate, 2007). This problem creates the research gap of this thesis, as a model that can be used for quantification purposes in industrial business-to-business selling needs to be conceptualized. The benefits/sacrifices perspective on value is selected as the basis of the construct as it is ideal for quantification purposes. Khalifa (2004) states that the benefits/sacrifices ratio model can consider customer value in a long time horizon, it can include almost all elements of the customer activity cycle, and it can provide clear signs for each value element in the quantification equations. However, benefits/costs ratio models generally do not link benefits and sacrifices with actual customer needs or what is most important to the customers (Khalifa, 2004). For this reason, when using the construct for quantification, a means-ends approach needs to be integrated in the process in practice. This means that the supplier has to find out the customer's needs and the importance of different value elements before they can quantify the value using the value construct. These aspects of value quantification will be further discussed in the next chapter.

As integrating several models and avoiding the creation of overlapping dimensions is challenging, a previous conceptualization of value (Töytäri and Rajala, 2014) is used as a basis for the new construct developed in this thesis. Töytäri and Rajala (2014) conceptualized value as a four dimensional construct, combining operational, strategic, social, and symbolic dimensions of value. The operational dimension relates to the operational performance of the company and affects the internal and external processes of the organization. The result of operational value is manifested in lower operational costs and higher output value. The strategic dimension pertains to organizational change and survival ability of the company. It is created through the better utilization of current capabilities or the development of new capabilities through innovation, know-how, and learning. The social dimension includes the external, market signalling effects of the business relationship. The symbolic dimension, on the other hand, relates to the internal effects of the business relationship, and can manifest for example in personal motivation, pride and job satisfaction in individual employees and groups.

When discussing customer value, it is very important to keep in mind its fundamental characteristics; customer value is always determined by the cus-

tomer. In order to be useful in quantification and selling, the value construct should comprise of dimensions that relate to the customer's business. The construct of Töytäri and Rajala (2014) is selected as it presents the operational and strategic dimensions, which are indeed relevant for all organizations in the world.

However, when contemplating on the applicability of the social and symbolic dimensions, it can be concluded that in both cases the value created for the customer as an organization manifests primarily in the form of operational value. Symbolic value affects individuals and groups that can experience emotions that the customer organization itself does not have. Therefore the effects of symbolic value on the customer organization manifest through the individuals. Motivation on the other hand is the primary force driving an individual to perform any task. Thus, symbolic value can have effects on individuals' motivation, which on the other hand influences the customer organization. The value created through motivation can manifest, for example, as decreased sick leave days, improved work performance, lower turnover of personnel, or improved cooperation with the supplier. The social value dimension, on the other hand, can create value through reduced new customer acquisition costs or perhaps increased business opportunities. Because of the aforementioned reasons, the new conceptualization of value integrates the social and symbolic value dimensions into the operational dimension.

Thus, building on the value definition of Töytäri & Rajala (2014), in this thesis customer value is defined as *a two dimensional construct, in which value is the perceived difference of benefits received and sacrifices made by the customer. Benefits and sacrifices combine the operational and strategic dimensions of value*. The construct is now discussed in more detail.

2.4.1 Benefits, sacrifices, and risks

Value consists of give and get components that result in perceived value (Lin et al., 2005). These components are referred to as benefits and sacrifices (Zeithaml, 1988), but what actually qualifies as a benefit or a sacrifice? Flint, Woodruff, and Gardial (1997) propose that value can change either in the positive direction by a perceived increase in benefits or a decrease in sacrifices, or in the negative direction by a perceived decrease in benefits or an increase in sacrifices. However, as mentioned before, value depends on the situation and is affected by comparison (Anderson and Narus, 1998; Eggert and Ulaga, 2002; Holbrook, 1996; Woodruff, 1997). When a solution is compared to the current situation, losing some feature could be intuitively counted as a sacri-

fice. However, if a customer knowingly gives up some current features in order to gain more benefits in other features, then the loss of a feature can actually be considered a decrease in benefits. As the benefits of the feature are lost, the operations of the customer might suffer in some way. Those operational problems need to be fixed, which requires time, effort, energy, and monetary resources. In this way the loss of the original feature can be considered as a decrease in benefits, followed by certain sacrifices that have to be made due to the occurring situation. Thus, it is good to note that in this example both the benefits decrease and the sacrifices increase.

Risks are an important decision making criteria in organizational buying (Hunter et al., 2004), and thus, have an effect on the buying behaviour of customers (Johnston and Lewin, 1996). Risks concern all activities within and between organizations, and thus also relate to each of the value elements in the value construct. As risks are those uncertainties that the customer must accept before, during, or after the purchase of the offering (Graf and Maas, 2008), in addition to economic sacrifices, risks in fact constitute the rest of the sacrifices relating to the value elements. Warranties can be used in business relationships to create value (Ulaga and Eggert, 2005) by decreasing the customer's risks or the actual effects of when a risk realizes. The supplier can increase, decrease or mitigate existing risks, or create new risks for the customer. The specific risks relating to the different value elements and dimensions are discussed separately in each group of value elements.

2.4.2 The operational value dimension

The operational value dimension is partly built on the resource-based view of the firm. All of the organizations assets, processes, skills and knowledge can be seen as resources (Barney, 1991). Furthermore, capabilities are complicated mixtures of skills and knowledge which the company executes through its processes to utilize its resources (Day, 1994). Keeping these definitions in mind and combining them with the value constructs from literature, we define the operational value dimension to consist of five groups of elements: Economic, Product-related, Service-related, Process-related, and Cooperation-related.

Economic value elements
This group consists of all economic benefits and sacrifices that occur to a customer during the relationship. An economic benefit can be the resale value of any asset. For example if a company purchases components, the components have a monetary worth which the company could realize by selling the components forward. Economic sacrifices on the other hand include the lifecycle

costs of the relationship and the offering (Töytäri and Rajala, 2014). The time of employees is also considered as an economic cost. The costs can be easily divided into the price, acquisition costs and operations costs (Menon et al., 2005).

The price constitutes the monetary sacrifice made when purchasing the offering and it is mentioned in the literature by many researchers (Anderson et al., 1993; Menon et al., 2005; Monroe, 1990; Ulaga and Eggert, 2005). Lapierre (2000) argues that the sacrifice of price includes also the justification and perceived fairness of the price, implying that the degree of the sacrifice could be lowered if the price is seen as reasonable by the customer.

The acquisition costs on the other hand consist of the costs incurring from acquiring, storing, ordering, delivering, and installing the offering, together with the relationship governance and management costs that incur from activities such as measuring the supplier's performance, and coordinating and communicating with the supplier (Menon et al., 2005; Monroe, 1990; Ravald and Grönroos, 1996; Töytäri and Rajala, 2014).

Finally, the costs that incur from daily operations are included in the operations costs. They can be costs of research and development, manufacturing and other processes, internal coordination, or repair and maintenance (Menon et al., 2005; Monroe, 1990; Ulaga and Eggert, 2005). The acquisition and operations costs also include all costs incurring from problems or failures, such as broken machinery, downtime (Menon et al., 2005), delayed delivery, or incorrect invoices (Ravald and Grönroos, 1996). Any decreases in costs can be a result of negotiations and discounts (Gwinner et al., 1998) or improvements in the other elements of operational value leading to, for example, savings in time or materials.

Product-related value elements

The second group of value elements concerns the various products a supplier can deliver to a customer. As Töytäri and Rajala (2014) argue, process input improvements create operational value. In this case process inputs are tangible products, components, or raw materials that are utilized in the customer's processes. Suppliers can create more value to a customer by offering improved process inputs. The improvements can be made in three areas: the quality, conformance, and supply of the given product.

Quality can include various aspects such as performance, durability, reliability, consistency, ease of handling, and even appearance (Lapierre, 2000; Ritter and Walter, 2012; Ulaga and Chacour, 2001; Ulaga and Eggert, 2005; Wilson and Jantrania, 1994). All of these features affect the efficiency and outputs of

the process the product is used in. For example increased durability and reliability of a machine part can lower a customer's production line's maintenance and repair costs together with reducing unnecessary downtime. On the other hand, quality-related risks concern all the aforementioned features of quality, and can be realized for example through defected products that could, in the worst case, impair some part of the customer's process and cause a substantial negative impact on the customer's business.

Many researchers include fitness for purpose or conformance to requirements as a quality feature, but in this thesis conformance is detached from quality. Conformance relates to how well the product meets the requirements for it and how well it fits for the purpose it is used for (Ulaga and Eggert, 2005). If a company purchases perfect diamonds instead of the aluminium that they would actually need to make car wheel rims, would there be a quality problem with the product, or is the quality good but the company just purchased the wrong product? This example might be exaggerated but it illustrates the reason why quality and conformance could also be separated. To increase the conformance of their products, suppliers can either offer a range of alternative products (Lapierre, 2000; Ulaga and Chacour, 2001) or they can customize the products according to customer-specific requirements (Lapierre, 2000).

Finally, operational value can also be created through the flexible, reliable, responsive, and fast supply of products (Lapierre, 2000; Ulaga and Chacour, 2001; Wilson and Jantrania, 1994). Logistical superiority (Ritter and Walter, 2012) and a global source of supply (Ulaga and Chacour, 2001) can be a supplier's main strategy to decrease costs and risks in a customer's business. However, the risks of bad availability, no delivery, or delayed delivery can have a large negative impact on the customer's business (Ravald and Grönroos, 1996).

Service-related value elements

Service-related value elements include all the services delivered to customers, such as training, maintenance, installation, repair, technical support (Monroe, 1990; Ulaga and Chacour, 2001), call-back services (Ravald and Grönroos, 1996), and other process support services. The same elements pertaining to product-related value apply also to the service-related value, namely quality, conformance, and delivery.

In services the conformance and delivery elements are highly connected to the quality of the service as services are by nature different from products. Services are intangible and cannot be stored; each service has to be performed

separately (Vandermerwe and Rada, 1988), making them unique. Services can be performed either by the supplier, the customer, or in cooperation, making them also highly interactive (Heinonen, 2004). Service quality is widely referred to as a value creation element in academic literature (Ritter and Walter, 2012; Ulaga and Eggert, 2005). It can be defined as the measure of how well the performed service matches customer expectations about the structure, the process and the outcome of the service (Menon et al., 2005). Technical quality of the service can manifest as creativity and the ability to demonstrate process knowhow in the customer's business by utilizing new technologies and offering wider solutions to problems (Lapierre, 2000). The reliability of service pertains to all the service-related elements as it relates to the suppliers competent staff and their ability to do exactly what was promised, when it was promised to be done, and also doing it right the first time (Lapierre, 2000). The conformance aspect of services is determined by the agreed content, including preferential treatment and additional services (Gwinner et al., 1998), and other content-related reliability and flexibility of the service (Lapierre, 2000). The conformance of services depends much on the supplier's ability to fulfil special requests in surprising or changing situations (Lapierre, 2000). The delivery aspect includes flexibility in adjusting service delivery, the speed of responding to requests, reliability, and speed (Lapierre, 2000; Ulaga and Chacour, 2001; Wilson and Jantrania, 1994).

Training is considered as an important individual process support service (Ulaga and Chacour, 2001; Wilson and Jantrania, 1994), as it can lead to the customer developing better capabilities, which on the other hand can result in operational value (Töytäri and Rajala, 2014) and in the long run even strategic value. Suppliers can use various types of training, seminars, information, and literature to develop customer's competencies (Ulaga and Chacour, 2001; Wilson and Jantrania, 1994). However, Ravald and Grönroos (1996) identify that competence development includes adaptation sacrifices. These sacrifices can be increased risks and costs that result from slower execution of tasks, mistakes, misunderstandings, change resistance, and other challenges that are present when learning new abilities.

Process-related value elements

Operational value can manifest in improvements of processes and process integration (Töytäri and Rajala, 2014). For this reason, process modification and process integration are two discrete process-related value elements. Modifications can be any kind of changes in the customer's processes, and together with improved process integration they can result in improved process effi-

ciency, increased speed to market (Kothandaraman and Wilson, 2001), and improved output value (Töytäri and Rajala, 2014). Process outsourcing is also included in this group of elements as it entails modifications in the customer's processes as well as the integration of those processes. Process outsourcing enables the customer to gain better control of the shared processes (Töytäri and Rajala, 2014), and thus creates operational value through process efficiency. Process modification and integration include the same kind of adaptation sacrifices that competence development does (Ravald and Grönroos, 1996). There is also a risk that the customer's integrative capacity is exceeded causing the value creation to be hindered (Ritter and Walter, 2012).

Cooperation-related value elements

Operations-related value elements, which are usually referred to as relationship-related, constitute the group of cooperation-related value elements. This group includes three value elements: Efficiency, Motivation, and Market signals.

The relationship-related cooperation efficiency is recognized to affect operational performance (Hunter et al., 2004; Töytäri and Rajala, 2014). Essentially cooperation efficiency is about how well the two organizations work together. Wilson and Jantrania (1994) argue that people make relationships work or fail, as business relationships are managed by individuals (Ulaga and Eggert, 2005). Interorganizational personal relations are seen to strengthen the business relationship and create operational efficiency (Ulaga and Chacour, 2001; Wilson and Jantrania, 1994) for example by reducing cooperation and relationship governance costs (Töytäri and Rajala, 2014). Deep relationships create trust and shared culture which support mutual goals (Wilson and Jantrania, 1994), concurrent engineering activities, and process changes that increase speed to market and lower costs (Kothandaraman and Wilson, 2001). The flexibility and solidarity of a supplier can help the customer to deal with surprising and problematic situations (Lapierre, 2000; Menon et al., 2005), and this way soften the impact of market dynamics (Töytäri and Rajala, 2014). In addition, Menon, Homburg, and Beutin (2005) argue that the commitment of the supplier can reinforce the relationship and decrease the customer's operations costs. The history development between the companies creates benefits to customers (Gwinner et al., 1998) as it can help improve cooperation efficiency through familiarity and effectiveness (Ravald and Grönroos, 1996). A good supplier can also create value to the customer by having efficient processes and a diverse supplier portfolio (Menon et al., 2005), through which

they can reduce the customer's operational risks that arise from fluctuations in demand.

If the cooperation between the companies does not work in an optimal way, the cooperation-related sacrifices increase through the increase in time, cognitive effort, and energy taken from other activities (Lapierre, 2000; Ravald and Grönroos, 1996), resulting in the risk of lowered operational efficiency. These sacrifices are made in all meetings, negotiations, trainings, and other relationship building sessions with the supplier. Conflicts arising from frequent or controversial arguments and disagreements with the supplier are also deemed as cooperation-related sacrifices (Lapierre, 2000) as they affect the personal relationships between the companies, and thus also cooperation efficiency.

The motivational value element is twofold, and originates from interactions and conceptions. The interactional motivation originates from social interactions, whereas the conceptual motivation arises from the supplier's reputation and image perceived by an individual. Both of these motivation elements relate to individuals emotions and behaviour, and can also be spread within the organization through social interaction. For example being respected and recognized by co-workers for working with a successful or innovative supplier can increase an employee's motivation (Ritter and Walter, 2012). Here the supplier's reputation positively affects the co-workers and their social interaction with the specific employee creates individual motivation.

As mentioned before, personal relationships make business relationships work (Wilson and Jantrania, 1994). Aside from affecting the cooperation efficiency, personal relationships and interaction can also create individual motivation, which increases employee efficiency and performance (Ritter and Walter, 2012). This is supported by researchers stating that relationships provide an outlet to express individual identity and a possibility to signal social status (Ravasi and Rindova, 2008; Töytäri and Rajala, 2014). Reduced anxiety, confidence, fraternization, friendship, and personal recognition are among the personal emotional benefits affecting individuals (Gwinner et al., 1998). The motivational impact of social interactions and conceptions is acknowledged by many researchers (Gwinner et al., 1998; Ulaga and Eggert, 2005; Ulaga, 2003; Walter et al., 2003; Wilson and Jantrania, 1994) and is also suggested to have an impact on job satisfaction and employee retention (Töytäri and Rajala, 2014). Better retention of employees can also result in better retention of organizational knowhow.

The sacrifices of time, cognitive effort, and energy pertain to the motivation element through their psychological effects on the individual. It is also justifia-

ble to state that if personal relationships can cause confidence, friendship, recognition, pride, and motivation, they can also cause hate, insecurity, social exclusion, shame, or other negative social effects on individuals. These effects can in turn translate to poor work performance and reduced cooperation efficiency, which are operational risks.

Being associated with a highly esteemed supplier or business network can improve the image or reference value of the company in business markets (Hinterhuber, 2008; Möller and Törrönen, 2003; Töytäri and Rajala, 2014). This type of market signals can improve many aspects that create value for the customer, such as the customer's brand name, reputation (Wilson and Jantrania, 1994), corporate image (Lapierre, 2000; Ulaga and Chacour, 2001), legitimacy (Töytäri and Rajala, 2014), credibility (Ulaga and Chacour, 2001), and reliability of the company (Ravald and Grönroos, 1996). The supplier's public relations are also a tool that can be used to create value for its customers, as improving the supplier's own image is valuable to customers as well (Ulaga and Chacour, 2001). The improved reference value and market access can create operational benefits through gaining new customers and distributors, reducing customer acquisition costs, and improving the retention of customers (Möller and Törrönen, 2003; Töytäri and Rajala, 2014; Walter et al., 2003).

However, market signals can work in the opposite direction as well. Relationships also carry a reputation risk (Töytäri and Rajala, 2014), which can have a big impact on the customer's business. An example would be for a company with a high appreciation for corporate responsibility to be associated with a company that uses child labour.

2.4.3 The strategic value dimension

The strategic value dimension relates to the organization's ability to change and survive (Töytäri and Rajala, 2014), which makes it highly related to the company's ability to maintain their competitiveness in the market. Strategic value is the reason for creating relationships, but it is also the most difficult value to predict and measure as it is created in the long-term (Wilson and Jantrania, 1994). All value that influences the organizations long-term competitiveness is included in the strategic value dimension. Strategic value can be divided into three groups: Resource access-related, Capability-related, and Partnership-related value elements.

Resource access-related value elements

Resource access relates to the customer gaining access to networks, information, and other valuable resources through the supplier. Resource access originates from the wider network-related social and structural bonds of the supplier (Möller and Törrönen, 2003; Töytäri and Rajala, 2014; Wilson and Jantrania, 1994). The network connections of the supplier can link the customer to other suppliers, research and government institutions, possible customers, industry associations, or perhaps organizations with a gatekeeper position for specific markets or other significant influence (Möller and Törrönen, 2003; Ritter and Walter, 2012). In addition to the supplier, these actors might possess relevant resources, such as information, for enhancing the customer's business processes (Möller and Törrönen, 2003). Gaining access to information can support learning and innovation in the customer organization (Möller and Törrönen, 2003; Walter et al., 2003). Companies also need information about their environments in order to manoeuvre successfully, and can gain critical technical or market-related information from suppliers and their network connections (Möller and Törrönen, 2003; Ritter and Walter, 2012). By utilizing the supplier's resources, customers can execute more large and risky long-term development projects, and gain access to a wider range of technological inputs (Ritter and Walter, 2012).

The risks relating to resource access work in the opposite direction as the benefits. In addition to the customer having access to resources, there is a risk of the competitors also gaining access to similar networks and resources (Ritter and Walter, 2012). Furthermore, as an opposite of gaining access, the customer can also have a risk of leaking resources, such as proprietary knowledge or intellectual property rights (Töytäri and Rajala, 2014). Finally, the customer's reluctance to adopt external inputs is a major barrier for resource access-related value creation as the adoption of external contributions, such as information, contacts, and inventions is hindered (Ritter and Walter, 2012).

Capability-related value elements

The capability-related value originates from utilizing the supplier's capabilities to develop and leverage the capabilities of the customer organization. Learning, supplier knowhow (Ulaga and Eggert, 2005), and innovation (Töytäri and Rajala, 2014) improve the customer's ability to develop new capabilities, leverage existing capabilities, and absorb them from the external environment, which in turn supports future innovation. The supplier's capability to innovate is mentioned by many researchers as a method of creating value for customers

(Möller and Törrönen, 2003; Ritter and Walter, 2012; Ulaga and Chacour, 2001). Instead of creating offerings similar to their competition, suppliers can have the ability to invent and produce offerings that provide more value than the existing offerings in the market (Möller and Törrönen, 2003). The supplier's contribution to the customer's product and process innovations can happen through innovative ideas, innovative components or production facilities, or even by joint working and development projects (Menon et al., 2005; Möller and Törrönen, 2003; Ritter and Walter, 2012). These offerings, which are either produced by the supplier or together with the customer, might even form new industry standards (Möller and Törrönen, 2003) and influence the customer's competitive advantage substantially. On the other hand, in some industries, for example the technological field, continuous and incremental innovations are required in order for the supplier to maintain the customer's competitiveness (Möller and Törrönen, 2003). Thus, supplier knowhow (Ulaga and Eggert, 2005), technical competence (Lapierre, 2000), and the ability to reduce the customer's time-to-market (Menon et al., 2005; Ulaga and Eggert, 2005; Wilson and Jantrania, 1994) can provide customers with substantial strategic value. In addition, the customer's organizational learning ability supports the creation of strategic value, as it can improve the acquisition of external skills and capabilities (March, 1991; Töytäri and Rajala, 2014).

There are several risks involved with the capability aspect of strategic value. The erosion of own capabilities can occur when the customer absorbs and acquires resources and capabilities from the external environment, and thus, reduces its own efforts in the same areas (Ritter and Walter, 2012). If the customer does not have internal capabilities, they will not be able to absorb external capabilities well (Ritter and Walter, 2012). This causes a similar situation with having reluctance to adopt external inputs.

Partnership-related value elements

The value that is created due to the long-term nature of the relationship is referred to as partnership-related value. Thus, the continuity aspect of the operational value can also lead to partnership-related value. Safety, security, credibility and continuity create trust which supports the creation of long-term relationships (Ravald and Grönroos, 1996). Trust is important in interorganizational relationships as it enables both parties to focus on achieving long-term benefits (Menon et al., 2005). A long-term relationship or partnership should be driven by strategic goals, as the reason for creating relationships is to gain competitive advantage, strengthen core competencies, and create market position (Wilson and Jantrania, 1994). However, partnering and setting mutual

long-term goals and objectives is risky, which emphasizes the need for a trust-based relationship (Menon et al., 2005).

A partnership with the wrong supplier might also lead to unhealthy dependencies or even a lock-in position, which the customer cannot find a way out of (Töytäri and Rajala, 2014). All of the operational and strategic risks a supplier creates for the customer can result in rising costs and lost competitive advantage, creating an opportunity cost for the chosen partnership, as the wrong choice might ultimately threaten the survival of the entire customer organization (Töytäri and Rajala, 2014).

2.5 Summary of the chapter findings

To answer to the problem of the literature not providing a value construct that is well suited for operationalization (Smith and Colgate, 2007), a new conceptualization of customer value is proposed by integrating the value dimensions and elements of several existing value constructs.

This study characterizes customer value as customer-oriented, subjective, multifaceted, situational, dynamic, varying in time span, and causal in nature. It is conceptualized as a two dimensional construct, in which value is the perceived difference of benefits received and sacrifices made by the customer. Benefits and sacrifices combine the operational and strategic dimensions of value. Economic, product-related, service-related, process-related, and cooperation-related value elements constitute the operational value dimension. The strategic value dimension on the other hand includes resource access-related, capability-related, and partnership-related value elements. The proposed value construct is presented in figure 3 on the next page.

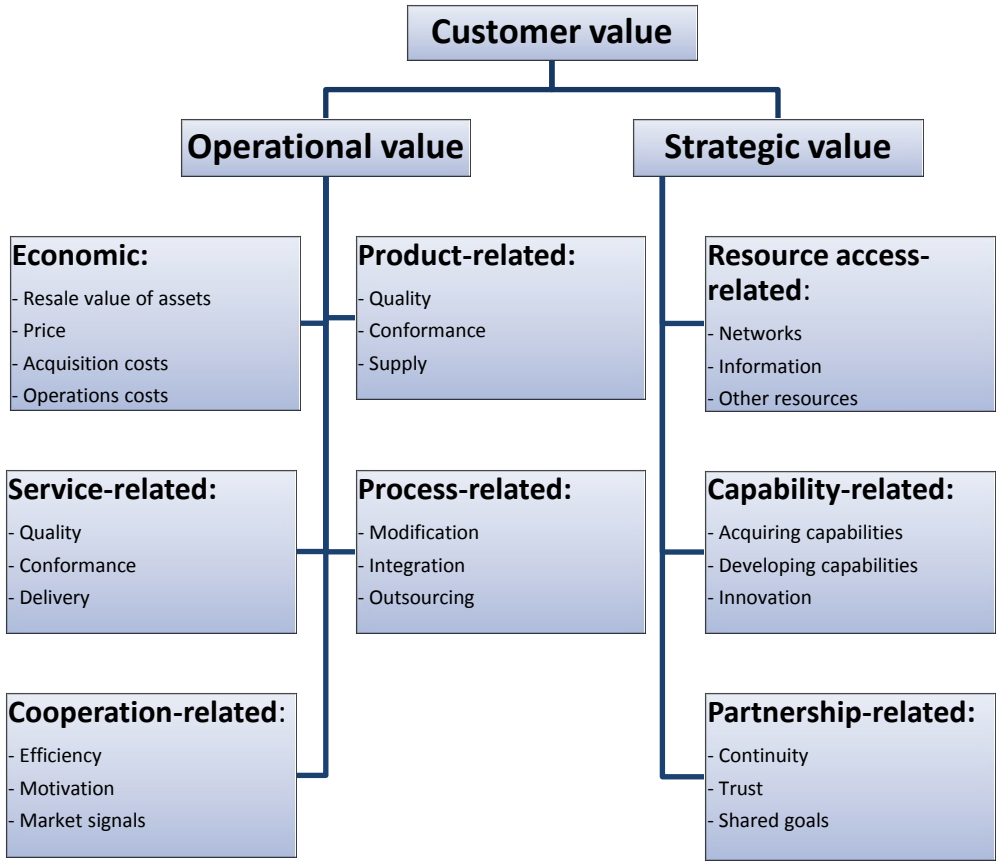

Figure 3 the proposed value construct

3. Value Quantification and Value-based Selling

3.1 Paradigm shift in the business markets

Value quantification is a small part of the sales organization's efforts to create relationships and capture value. Its popularity in selling has increased as more and more companies have shifted their strategic focus towards creating and selling value. In order to understand how the proposed value construct could be quantified in the best possible way, it is important to also understand the driving forces behind the paradigm shift of how organizations compete in the business markets.

3.1.1 From products and services to creating value

Organizational buying has become more sophisticated and professional (Hunter et al., 2006), leading to increased buying power through improved sourcing in global supplier markets and commoditization of products (Matthyssens and Vandenbempt, 2008), which erodes competitive differentiation of suppliers (Matthyssens and Vandenbempt, 2008). Suppliers use either competition or cost-based pricing strategies (Töytäri and Rajala, 2014), drive their prices down, and generate reduced profits (Anderson and Narus, 1998; Matthyssens and Vandenbempt, 2008). For suppliers the change towards more demanding customers, increased global competition, and slower economic growth has created the need to differentiate from their competition (Woodruff, 1997). They have started to transform their business models from product-led towards service-dominant earning logics, emphasizing capitalizing customer perceived value and value co-creation for example through solutions,

lifetime services, and value (Terho et al., 2012; Töytäri and Rajala, 2014). The movement of companies focusing on offering combinations of goods, services, support, self-service, and knowledge was early on defined as servitization by Vandermerwe and Rada (1988). The cumulative effects of servitization have changed the competitive dynamics of companies as they increase the amount of services in their offerings and spread their focus by trying to also identify the problems of their customers' customers. Vandermerwe and Rada (1988) state that servitization acts as a great tool for gaining competitive advantage, as services improve customer retention and loyalty, promote long-term relationships, and help companies differentiate themselves from their competition. Additionally, the sales revenue grows going from core products to add-on services, solutions, and finally to customer process innovation (Kaario et al., 2003), making value-oriented strategies attractive to businesses.

3.1.2 Strategic focus on value creation

The most common approach to value-adding strategies is that the supplier adds a products technical features and supporting services in a way that has nothing to do with the customers' needs (Ravald and Grönroos, 1996). Thus, building customer value-based strategies require the supplier to first understand what the concept means. Selecting the right goals and customer segments, understanding the customer's value chain, their needs, and their value concepts, and creating value propositions to match them are in the core of the strategy (Anderson and Narus, 1998; Flint et al., 1997; Ravald and Grönroos, 1996; Slater, 1995; Woodruff, 1997). All the processes together with the culture and structure of the organization should support the value creation strategy and be aligned with creating customer value (Slater and Narver, 1995; Woodruff, 1997). Customer satisfaction should be continuously measured and improved as it is a good measurement of how well the supplier is creating value to its customers and a strong predictor of repurchasing, word-of-mouth, and customer loyalty (Eggert and Ulaga, 2002).

Customer satisfaction also helps to create long-term business relationships (Liu and Leach, 2001). Long-term relationships are an essential part of value creation as trust, commitment, and information sharing enable better cooperation (Anderson and Narus, 1998). Furthermore, long-term relationships are even argued to decrease the uncertainty of value creation (Wilson and Jantrania, 1994). Learning from customers and translating it to processes become a core competency issue, and so, adopting a customer value orientation

can possibly require rethinking of the entire culture, structure, and managerial capabilities of the organization (Woodruff, 1997).

Understanding the company's own offerings is a prerequisite for developing the offerings by adding more customer value drivers to them (Lapierre, 2000). The supplier has to also understand the changes occurring in the customer perceived value and adapt their offering accordingly (Flint and Woodruff, 2001; Flint et al., 1997). Understanding customer value helps creating value in practice by being able to develop new additional services and offerings, by gaining new customers due to improved marketing, and by retaining customer relationships by demonstrating the value that has been successfully created (Anderson and Narus, 1998).

Committing to customer value innovation, eliminating activities that cost more than they are worth, and improving the efficiency of the value creating activities are essential tasks in value creation (Anderson and Narus, 1998; Slater, 1997). In addition to creating value, the organization has to also be able to sell it to their customers. However, the methods of selling value differ from selling just products and services. Therefore, a value creation strategy also needs to be accompanied by a value-based selling approach.

3.2 Value-based selling

Terho et al. (2012) summarize value-based selling as a selling behaviour that is based on the creation of customer value. The definition agrees with the one proposed earlier by Töytäri et al. (2011), who state that value-based selling can be defined as understanding and improving the customer's business in a proactive manner. Thus, this orientation of selling differs from the traditional reactive, product-led selling in many ways.

3.2.1 Special characteristics of the approach

Value-based selling aims at co-creating value and business impacts in the customer's business processes, resulting in increased profits for both the customer and the supplier (Anderson and Narus, 1998; Kaario et al., 2003; Töytäri and Rajala, 2014). This is achieved by the supplier proactively targeting the customer's business processes and consultatively identifying and communicating problems even before the customer is aware they exist (Kaario et al., 2003). This approach enables the supplier to do business before the customer even considers a sourcing initiative, which helps the supplier to avoid competition and influence the customer perceived value (Töytäri et al., 2011).

The fact that value-based selling requires deep understanding of the customer and what they value (Kaario et al., 2003; Töytäri et al., 2011) means that not only is the supplier needed to allocate resources in building a relationship and executing the sales process, but the customer has to be willing do so as well (Kaario et al., 2003). Additionally, it is important to focus the sales effort high enough in the management hierarchy (Kaario et al., 2003). This action ensures access to the customer's business processes and eliminates any resistance from lower level decision makers, who are not able to establish a long-term relationship and the necessary exchange of information and data. Furthermore, for value-based selling to succeed, the value of the offering should preferably be underestimated, unknown or difficult to perceive (Töytäri et al., 2011). To summarize, value-based selling is not ideal for organizations either offering or purchasing bulk products or simple services, emphasizing the importance of identifying relevant opportunities.

As value-based selling utilizes value as its main sales argument, the supplier has to provide evidence of the value it is able to deliver to the customer. Being able to measure the proposed value construct is thus important as it provides the means to quantify value. But in addition to quantifying customer value, a supplier has to be able to also secure, or capture, short and long-term value in the relationship (Kaario et al., 2003). In order to capture a fair share of the value creation potential, the supplier can also utilize the quantified value to support the pricing of their offering.

3.2.2 Applying value to pricing

After establishing the potential for value delivery and the value has been quantified and communicated to the customer, the supplier needs to determine what portion of the net value it wishes to capture from the exchange. For this purpose, suppliers can use value-based pricing, which is potentially an effective tool for capturing value (Hinterhuber, 2004), as it provides possibilities for significantly higher margins for the supplier (Töytäri and Rajala, 2014). Value-based pricing is increasingly recognized in the literature as a superior pricing strategy (Hinterhuber, 2008).

In contrast to traditional cost-plus and competition-based pricing, in value-based pricing the price is set in relation to the market offering's value (Anderson and Narus, 2004). This means that value-based pricing uses the customer perceived value as a pricing reference, which on the other hand requires assessing, quantifying, and communicating the value to the customer (Kaario et al., 2003; Töytäri and Rajala, 2014). The price doesn't necessarily

have to be tied to the amount of value the supplier can quantify and demonstrate to the customer (Kaario et al., 2003), but it is important that the price is justified by the value created to the customer (Töytäri et al., 2011). The amount of value the supplier can deliver sets an upper limit to the value it can capture from the exchange (Brandenburger and Stuart, 1996).

Using value-based pricing also requires risk sharing and a unique position (Kaario et al., 2003), and is yet adopted by only a few industrial organizations (Liozu et al., 2012). Töytäri and Rajala (2014) note that value-based pricing can be difficult to implement due to several barriers, such as the difficulty to influence customers' desired value, the challenges of quantifying and communicating value, and the problem of changing the pricing reference focus from costs to value. The study indicates that today buyers are still more effective at establishing suppliers' costs as pricing reference than suppliers are at doing the same for the customer perceived value.

3.3 Value quantification

Quantifying value is an excellent method to shift the customer's focus from prices to business impacts, to demonstrate understanding of the customer's business, to identify the most relevant sales arguments, and to offer material for the customer's decision making process (Kaario et al., 2003). Hunter, Bunn, and Perreault (2006) propose that in proactive buying situations, instead of just looking for the lowest prices, customers perform wider analyses over the supplier and their offering. Thus, simulating the effects together with the customer leads to an analysis that can be valuable for both parties and can even reduce the customer's efforts.

3.3.1 The quantification process

Before actually quantifying value the supplier has to follow the guidelines of value-based selling. Identifying relevant opportunities, targeting the buying process early on, and focusing the efforts high enough in the management hierarchy are identified as important parts of successful value-based selling (Kaario et al., 2003; Töytäri et al., 2011), and thus, also value quantification. In this thesis the aforementioned tasks together with communicating the quantified value are considered as a part of the quantification process, as they are highly related to the successful execution of value quantification.

After the initial tasks are executed, the supplier has to gain an understanding of the customer's business and the value that can potentially be created (Anderson and Narus, 2004; Kaario et al., 2003; Terho et al., 2012; Töytäri et

al., 2011). This step is called value research (Anderson and Narus, 1998; Kaario et al., 2003). As mentioned in the previous chapter, the benefits/costs ratio model does not take the customer-specific situation and preferences into account (Khalifa, 2004). Value research is thus conducted in order to integrate a means-ends approach to quantifying value to the customer. The research process aims at gaining initial cooperation with the customer, creating a comprehensive understanding of the customer's business and their processes, and identifying the value elements through which the supplier can create value for the customer. Only the most important, salient value elements should be used in quantification in order to achieve the best result in terms of sales (Anderson et al., 2006). These elements should be mainly those that differentiate the supplier from its competition. Understanding the customer's business and finding the salient value elements are prerequisites for quantifying value.

After the value research is conducted, the supplier needs to develop an assessment of the offering's benefits and sacrifices relating to each of the salient value elements. The process starts with the selection of the metrics that will be used to quantify and demonstrate the effects of the cooperation on the customer's business (Töytäri et al., 2011). These metrics have to be tied to each of the identified salient value elements that the supplier creates value through. The baseline situation for each metric should also be mapped to enable comparison of the generated value. The baseline situation is compared to the new situation created through the cooperation in order to clearly demonstrate the business impact to the customer. The baseline situation can be the current situation, something that a competitor is offering, or possibly some other previous experience (Kaario et al., 2003). The supplier can now determine the accomplished performance and calculate the aggregated business impact (Töytäri et al., 2011).

When the supplier has gained an understanding of the amount of value it is capable of creating to the customer, they need to openly communicate and provide evidence of the value in order to convince buyers (Anderson and Wynstra, 2010; Terho et al., 2012; Töytäri et al., 2011). Value is best communicated to the customer by committing them to the entire quantification process and working together from the beginning to create a realistic and credible quantification. This way the value model is always validated thoroughly with the customer and any disagreements regarding the logic of the model or the quantified impacts are avoided (Anderson and Narus, 1998). Furthermore, reference cases in which the delivered value has been documented and proven, can provide undeniable evidence that convinces the customer of the value cre-

ation ability of the supplier, and thus, supports the quantification effort (Anderson and Wynstra, 2010; Töytäri et al., 2011). Suppliers need to verify and document post-purchase value for creating credible reference cases (Anderson and Narus, 2004). Measuring the post-purchase value not only shows the customer that the supplier is committed to the relationship, but also helps the supplier improve the accuracy of future assessments of value (Töytäri et al., 2011).

3.3.2 Value tools

In order for the salespeople to communicate and quantify value for the customers, value-based sales tools need to be developed (Kaario et al., 2003). It is important that the tools provide clear benefits to their users (Kaario et al., 2003) and that the users receive proper training for using them in practice (Anderson and Narus, 2004). Most of these value-based tools are either value case histories, that document the delivered value in past cases, or value calculators, that are used to calculate the value that the supplier is able to deliver to the specific customer (Anderson and Narus, 2004).

The value tools can in the simplest form be Excel workbooks that contain formulas that are designed to calculate and present the value to a customer. On the other hand, further developed tools can also be for example cloud based services that are integrated to the supplier's CRM system and a database of reference cases, industry averages, market information, and other data that might be relevant for quantification. Depending on the approach and the offering, the tools can be designed to be used together with the customer or separately by the supplier. In summary, the form of the tools that calculate value can vary entirely depending on the organizations preferences, offerings, and customers.

3.3.3 Value calculations

In order to communicate the value it must be first quantified through calculations that might range from simple addition to complex simulations. As the quantifiable salient value elements depend on the individual customer's current or future needs, the calculations can therefore be very customer-, industry- and situation-specific. This means that the supplier might need to redesign the calculations for each customer and case (Blois, 2004). However, Kaario et al. (2003) state that the calculations do not need to be entirely exact. The most important aspects are the assumptions, the logic of the calculations, and the discussed business impacts (Kaario et al., 2003; Terho et al., 2012),

only after those come the actual numbers. This is logical as quantifying value in sales entails forecasting potential value created in the future and not value that has already been realized.

In order to base the calculations on proof rather than assumptions, data must be gathered from the customer. A data heavy-assumption light quantification model is always more credible than the other way around (Kaario et al., 2003). Calculations that are heavily based on assumptions can make the customer sceptical about the quantified benefits, and thus, negatively affect the credibility of the results (Anderson and Narus, 2004; Kaario et al., 2003). This means that every time assumptions are made, they should be reasonable and explicitly presented to the customer (Anderson and Narus, 1998).

Detailed value calculations could also pose a problem for suppliers. In some cases a risk of spreading sensitive information about the offering can realize if the customer demands to see the specific calculations behind the quantified end results. On one hand, showing the calculations can increase credibility and promote trust, but on the other, it could reveal too many details of the supplier's innovative offering and value creation mechanisms. In these cases a non-disclosure agreement could help the supplier in preventing the information behind their competitive advantage from leaking into the markets.

3.3.4 Value aggregation

As Töytäri and Rajala (2014) propose, the quantifiable salient value elements need to be linked to the selected metrics that demonstrate the effects of the cooperation. Day (1999) presents a customer value equation stating that the value created to a customer would consist of the perceived additions to gross profit minus the perceived life cycle cost of the offering. The equation is introduced as a mechanism for understanding the value a customer perceives it will gain from purchasing the offering. Drawing from this, Day (1999) implies that customers are most interested in having the business impacts presented to them in economic metrics. This notion is also supported by (Anderson and Narus, 1998) who state that the data-driven presentation of what the supplier could do for its customers should be made in monetary terms. They also present the Fundamental Value Equation, which is very similar to the customer value equation.

According to the literature the quantified end benefits should be presented in the form of revenue increases, cost reductions, reductions of tied capital (Kaario et al., 2003), increases in rates, or improvements in the sales margin (Iloranta and Pajunen-Muhonen, 2008). According to Iloranta and Pajunen-

Muhonen (2008) these metrics are the central elements of profitability. Additionally, Töytäri and Rajala (2014) add risk reductions as a measurable outcome of economic benefits.

The DuPont-model provides an excellent tool for calculating the aggregated business impacts generated through the salient value elements. The model was originally designed to calculate the return on net assets (RONA), which is one of the most frequently used metrics of profitability (Iloranta and Pajunen-Muhonen, 2008). The model takes in consideration all the cost- and revenue-related elements, and thus, by modifying certain values in the model, the business impact of the value elements can be seen. Using the model might require the initial estimation of a given value element's effects on, for example costs, revenue, or material requirements of processes. These estimations could then be inserted in the model. A simplified DuPont-model is presented in figure 4.

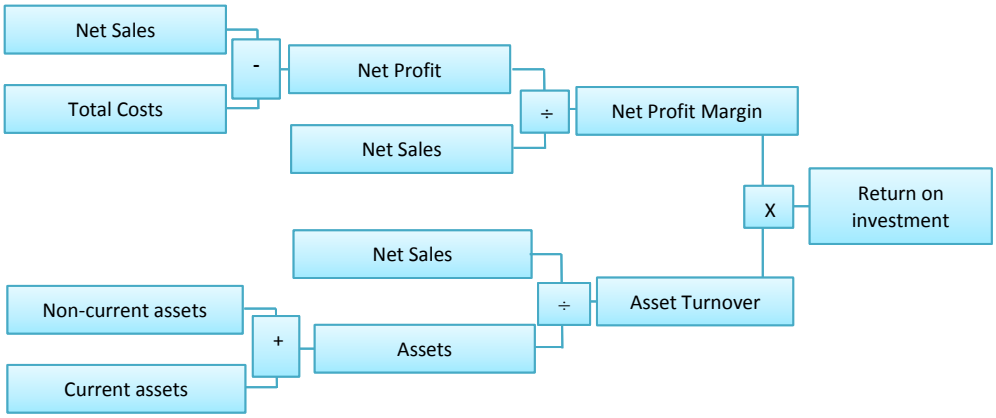

Figure 4 a simplified DuPont-Model (Iloranta and Pajunen-Muhonen, 2008)

However, all the value elements might not be quantifiable or presentable in monetary terms as they might be intangible or in some way hard to provide evidence about (Blois, 2004), affecting the aggregation of value. These elements are called value placeholders, and if not quantified, they should at least be presented in qualitative form if they are salient value elements (Anderson and Narus, 1998). It is also worth mentioning that instead of trying to quantify the direct value of a value placeholder element, the supplier could try to quantify the indirect effects of that element. However, the further the supplier goes into making assumptions and forecasts about indirect future effects, the less credibility and clarity the calculations will have. Thus, it is probably best not to attempt converting the value placeholders into monetary terms.

Despite the fact that value placeholders do not support value aggregation, they can still have a real influence in selling. Hansen et al. (2008) argue that when the service performance of competing suppliers is hard to evaluate, reliance will be put on extrinsic service attributes, such as corporate reputation.

Intangible benefits can thus play a more important role in the absence of accurate comparison regarding the quantifiable value elements.

3.3.5 Challenges of quantifying value

Although value quantification is critically important when trying to influence the customer perceived value (Anderson et al. 2006; Hinterhuber 2004), it has been challenging for industrial companies as they cannot define, measure, or communicate value to their customers (Lindgreen & Wynstra 2005; Töytäri & Rajala 2014). Töytäri et al. (2011) argue that only a few companies understand the real value potential of their offerings, creating an undeniable challenge.

The first challenges relate to fulfilling the initial requirements of quantifying value. As identifying relevant opportunities, targeting the buying process early, and targeting the high-level managers are requirements for successful quantification, the inability to satisfy them poses a challenge. Secondly, Blois (2004) argues that customizable value estimation is time consuming and can only be justified if the customer makes purchases of sufficient value. Thus, not having sufficient time to conduct the value research and quantification is identified as a challenge as well. Value quantification requires mutual trust and commitment from both parties of the relationship (Rackham & DeVincentis 1999). As the quantification process demands a lot of participation and resources from the customer, a lack in customers' resources can create a challenge for quantification (Töytäri and Rajala, 2014). Additionally, if the trust or the willingness to share information and data is not reached, the baseline information and other data can be unclear or inaccurate, leading to poor credibility of the quantification (Töytäri and Rajala, 2014). Value quantification requires the supplier to have a good understanding of the customer's processes and needs (Kaario et al. 2003) and the lack of understanding can lead in the customer and the supplier not achieving consensus on the salient value elements (Töytäri and Rajala, 2014). Finally, the difficulty of quantifying value is also considered a challenge (Töytäri & Rajala 2014). Calculative capabilities are often not found from traditional product sellers, making the quantification process (Kaario et al. 2003) and the training of value sellers difficult and time consuming (Töytäri et al. 2011).

3.4 Summary of the chapter findings

In order to bring the value construct into its practical context, the literature on value quantification and value-based selling is studied in this chapter. The previous literature provides this thesis with an interesting perspective to value

quantification processes, tools, and challenges. The value quantification-related findings from the literature research are discussed next and also presented in table 2 in the end of this subchapter.

3.4.1 Quantification process

The research suggests that the quantification of value should be done in cooperation with the customer throughout the entire process (Anderson and Narus, 1998). The process starts by understanding the customer's business, their hidden needs, and finding out the salient value elements (Anderson and Narus, 2004; Kaario et al., 2003; Terho et al., 2012; Töytäri et al., 2011). After this, a model that assesses the value creation potential is created (Anderson and Narus, 1998). It involves linking the salient value elements to different metrics that enable aggregating and demonstrating the effects of the cooperation on the customer's business (Töytäri et al., 2011). Economically measurable elements create benefits that should be presented to the customer through the central elements of profitability, namely revenue increases, cost reductions, reductions of tied capital (Kaario et al., 2003), increases in rates, or improvements in the sales margin (Iloranta and Pajunen-Muhonen, 2008). Additionally, risk reductions can be used as a measurable outcome (Töytäri and Rajala, 2014). Other intangible or otherwise not economically measurable elements, the value placeholders, should either be presented in qualitative form or they should be separately quantified and not aggregated to the aforementioned profitability elements (Anderson and Narus, 1998). Once value is quantified, it should be compared to the baseline situation to highlight the impact of the business relationship (Töytäri et al., 2011). If the quantification has been done in cooperation throughout the entire process, the value has already been validated and communicated in the best possible way. The next steps are for the supplier to execute the actual value creation in the relationship, and verify and document the value that has been realized (Anderson & Narus 2004; Töytäri et al. 2011).

3.4.2 Quantification tools

Value-based sales tools need to be developed to help the salespeople to communicate and quantify value for the customers (Kaario et al., 2003). In order to function properly, the tools must be beneficial to their user (Kaario et al., 2003) and the users must receive training (Anderson and Narus, 2004). Value-based tools are usually value case histories that document the value delivered in past cases, or value calculators that assess the value creation potential

of the offering (Anderson and Narus, 2004). Value calculators can in the simplest form be Excel workbooks that contain formulas that are designed to calculate the value created to a customer. On the other hand, the tools can also be very complex and integrate several systems and databases of reference cases, market information, industry averages, and other data that is used in the quantification. As reference cases provide undeniable evidence of the supplier's value creation potential (Anderson and Wynstra, 2010; Töytäri et al., 2011) they should be used in addition to the calculators or by integrating them to the calculations. The format, scope, calculations, and features of the tools depend entirely on the supplier's preferences, the industry they are used in, the offering they are designed for, and the customer they aim to calculate the value for.

3.4.3 Quantification challenges

Quantifying value proposes several challenges for industrial organizations. Because of these challenges only a handful of companies can define, measure, and communicate the value created to the customer (Lindgreen and Wynstra, 2005; Töytäri et al., 2011). Many of the challenges relate to the fact that the companies seldom understand their value creation potential. A deep understanding of the suppliers offering and the customer's business is required for the supplier to have the ability to calculate the value creation potential (Kaario et al., 2003). Achieving the necessary level of understanding also requires resources, time, and trust from the customer (Kaario et al., 2003; Rackham and DeVincentis, 1999). Lack in any of them can hinder the quantification effort or decrease the quality of the calculations. Lack of resources and time can lead to the supplier making the calculations independently and by using inaccurate assumptions due to the lack of available data and facts. The lack of trust might cause the customer to be unwilling to invest the resources and time in the quantification process of the supplier. The customer might either be unwilling to invest in the process or they might not have the resources or time. Either way, the true needs and preferences of the customer, the salient value elements, and the baseline situation for comparison cannot be identified, leading to the poor quality of the quantification. Ultimately, as value quantification relates to measuring value that is created in the future, it always includes forecasting and uncertainties that decrease the credibility and reliability of the calculations (Töytäri and Rajala, 2014). Additionally, value quantification requires calculative skills and a different approach to selling not possessed by traditional salespeople (Kaario et al., 2003). Thus, training value quantification to the salesforce creates yet another challenge (Töytäri et al., 2011).

Table 2 the quantification-related findings from the literature research

Topic	Quantification-related findings from the literature research
Process	**Gain understanding of the customer's situation** • Identify relevant opportunities and target the customer's buying process at an early phase • Investigate customer's hierarchy and focus efforts on higher management • Understand the customer's business drivers, processes and needs • Map all elements creating value and identify salient, differentiating value elements **Assess the value creation potential** • Select metrics to demonstrate business impacts • Create calculation logic and link salient value elements to the selected metrics • Map the baseline situation for comparison • Gather data for the calculations • Calculate the business impact of the offering **Communicate value to the customer** • Present the quantified value through the selected metrics • Commit customers throughout the quantification process • Use a non-disclosure agreement to protect sensitive information if necessary • Use transparent calculations and communicate assumptions clearly • Use reference cases to provide further evidence of the value creation ability **Execute post purchase activities** • Verify and document post purchase value • Evaluate and develop assessment accuracy • Create reference cases for future use
Tools	**Utilization of tools** • Can be used either to calculate and communicating the value creation potential of an offering or to communicate value created in previous cases • Calculators can be used independently or in cooperation with the customer **Format of tools** • Format depends on the needs and preferences of the company, and can range from Excel workbooks and PowerPoint presentations to web-based services **Functionality of tools** • Calculators consist of offering or customer-specific calculations regarding value elements relating to the offerings application • Calculate the business impacts of an offering using input data and assumptions • Can be used to present the quantified results to the customer • Advanced solutions include integration to other systems within the company for information transfer regarding reference cases, market information, and industry standards and averages • Value case histories include information and data about past reference cases
Challenges	**General challenges** • Lack of understanding the value creation potential of the own offering **Salesperson-related challenges** • Inability to identify relevant opportunities or target the customer's buying process early • Not being able to identify decision makers in the customer's management hierarchy • Lack of time to conduct sufficient value research and estimation • Lack of understanding concerning the customer's processes and needs • Lack of skills and logical mind set for executing value quantification **Customer-related challenges** • Lack of trust in the supplier or the salesperson • Unwillingness or inability to share information and data • Unwillingness or inability to invest resources in the quantification effort • Buying orientation focusing on prices and short-term costs

4. Research Methodology

4.1 Research design and approach

A research design is defined as a logical plan to get from making the research questions to a set of conclusions answering to the initial questions (Yin, 2009). In other words the research design guides the one conducting the research and helps to achieve the wanted outcomes in a systematic way. The most important components of a research design according to Yin (2009) are the research questions, research propositions, units of analysis, the logic linking the data to the propositions, and the criteria for interpreting the findings. The components of the empirical research design are all discussed in this chapter.

There are many approaches and methods for doing research (Järvinen and Järvinen, 2000; Strauss and Corbin, 2008) and the criteria for choosing the right approach relates highly on what the focus of the study is. The approach selected for the current research and the reasons behind the selection are discussed next.

4.1.1 Qualitative research

This thesis utilizes the qualitative research method in its empirical research. The qualitative research method is selected instead of the quantitative method because it offers distinct benefits that make it attractive for the use of this thesis. Strauss & Corbin (2008) state that the research questions should dictate the methodological approach that is used in the research. Both of the research questions require in-depth information to support the findings of the literature research. Hirsjärvi et al. (1997) propose that the qualitative research method is ideal for discovering and revealing facts that concern reality. Furthermore, learning about people and seeing the reality from their perspective is said to be in the heart of qualitative research (Strauss and Corbin, 2008), making the method ideal for this study as the focus of the empirical research is mainly on discovering information from the experiences of sales professionals. Thus, the qualitative research method is most suitable for the purposes of this study.

On the other hand, quantitative research is argued to be suitable for testing and validating theories or statements (Hirsjärvi et al., 1997) such as the proposed value construct. However, the quantitative validation of the construct is not in the scope of this study due to the limitations in the schedule of the thesis. Therefore, a formal survey is created and presented to provide means of validating the proposed construct in future research. The quantitative research method and the design of the formal survey are discussed further in the end of this chapter. The proposed value construct is however tested through the qualitative research method in the context of case company A to bring some light to the measurability of the proposed value elements.

Qualitative research consists of several different types of methods. Hirsjärvi et al. (1997) present a list of 43 labels of different branches of qualitative research. These methods overlap in many ways (Yin, 2009) making the comparison of the methods hard in some cases. However, one of the most recognized methods presented in the list is the case study research method.

4.1.2 Case study research

Case studies rely on multiple sources of evidence (Yin, 2009) and the different data collection methods can include surveys, interviews, observations, and documents that can be both in qualitative and quantitative forms (Järvinen and Järvinen, 2000; Yin, 2009). The motives of case studies can range from a simple descriptive presentation of a case, to testing theories, or even to a broad generalization creating new theories based on the case study evidence (Järvinen and Järvinen, 2000; Yin, 2009), making them very versatile and dynamic in nature (Strauss and Corbin, 2008). Yin (2009) distinguished between three different types of case studies, namely explanatory or causal case studies, descriptive case studies, and exploratory case studies.

The selection of the case study method can be justified by its good fit with the objectives and nature of the current study. According to Yin (2009) the case study is the preferred method when three requirements are satisfied. First, the focus of the research is on a contemporary phenomenon within a real-life context. Second, the one conducting the research has little control over the events that are studied. Third, the research proposes “how” or “why” questions that the empirical research strives to answer. All of the aforementioned criteria are present in the current study. First, the practical procedures and tools of value quantification in present day industrial companies are examined. Second, neither the experiences of the sales professionals nor the quantification procedures and tools of the companies are influenced by this research or the data

collection methods that are used. Third, the current research asks the questions of, first, how should value be conceptualized, relating to how is value created in business markets, and how can different kinds of value be identified and measured, and second, how should value be quantified, relating to how is quantification done in practice, why is value quantification difficult for industrial companies, and how should the challenges be overcome. The case study research method enables the evaluation of the value construct's measurability and suitability for quantification in the context of a case company. This means that all of the research questions can be answered by the combination of a literature research and a case study research. Therefore it can be concluded that the case study research method is suitable for the use of this thesis, and is thus selected. The nature of the research is exploratory as it strives to find out what procedures, tools, best practices, and challenges specific industrial companies possess regarding value quantification. However, there are two approaches to conducting case studies: they can be conducted on a single case or multiple cases (Järvinen and Järvinen, 2000; Strauss and Corbin, 2008; Yin, 2009).

4.1.3 Multiple case study research

Multiple case studies are studies that include two or more cases (Järvinen and Järvinen, 2000). According to Yin (2009) it is generally better to have a multiple case study because of the analytical benefits as the different cases can be compared and direct replication of the case results can be achieved. Additionally, in this thesis multiple cases can provide more alternative methods and best practices concerning practical value quantification, and thus provide more value than a single case. As several units of analysis can be identified, an embedded design is most suitable for the case. The main unit of analysis is the activity through which companies assess and communicate the value creation potential in a business relationship. There are also several subunits of analysis within the main unit of analysis. They are the quantification processes, tools, and challenges. Furthermore, the fit of the conceptualized value construct constitutes an additional subunit of analysis in one of the cases. For the aforementioned reasons the embedded multiple case study approach is selected.

A framework of the case study method presented by Yin (2009) is used to conduct the research. The process begins with the identification of theoretical findings of the literature research. This is followed by the design of case selection and data collection, which are discussed in the following subchapters. Each case is then prepared, collected, and analysed separately. The results are

then compared in a cross-case analysis resulting in the conclusions and implications of the study.

The case studies are conducted confidentially at the request of the case companies. This means that any details that might reveal or give implication to the identity of any of the case companies or the interviewees cannot be disclosed in this thesis.

4.2 Case selection, data collection, and analysis

In this thesis the findings of the literature research are confirmed by having literal replications of the case study results. Literal replication means that each of the cases should predict similar results concerning the findings (Yin, 2009). This puts emphasis on the case selection, which is discussed next in this subchapter.

4.2.1 Case company selection

As the focus of this research is on value quantification in selling in industrial companies, it is logical that industrial case companies are selected. In order to provide a wider perspective for the research, case companies operating in different industries are selected. Having multiple companies from differing industries should make the results of the case study more generalizable if literal replication is achieved in respect to a given finding. Furthermore, only global case companies that satisfy the criteria for large enterprises are selected as they have systematic processes and tools in addition to varying cultures among employees and customers. This diversity can create more credible and generalizable results from the study. However, each of the companies has operations in Finland, which is an important reason to why the five cases were selected. Additionally, the companies are in cooperation with the FUTIS research program, and were thus easier to recruit to take part in the current research.

Case company A is the most relevant case for this study, as most of the data gathered in this research is from company A. Companies B, C, and D provided additional data regarding value quantification processes, tools, and challenges. Data from case company E is received from a separate research that is also a part of the FUTIS research program. The different data collection methods regarding each of the case companies are discussed next.

4.2.2 Data collection methods

An important benefit of qualitative research is that there are multiple alternative sources of data, such as interviews, observations, videos, documents, drawings, and diaries among other sources (Strauss and Corbin, 2008). This variety of data sources also extends to the case study method. Yin (2009) argues that there are six most commonly used sources of evidence in case studies. They are documentation, archival records, interviews, direct observations, participant-observation, and physical artefacts. This study utilizes these sources and the three principles of data collection by Yin (2009), namely using multiple sources of evidence, creating a case study database, and maintaining the chain of evidence. The main data collection methods of this research are interviews, observations in group sessions, company internal and external documents, and externally documented interview data. These methods are discussed next.

Interviews

Yin (2009) identifies the interview as the most important source of case study data. Interviews are a form of structured conversations that effectively provide information about behavioural events such as practical value quantification in this case, but it is notable that an interview can have weaknesses as a data collection method due to bias, poor recall, and poor articulation of questions (Yin, 2009).

All the individual interviews of the study are held with company A representatives. Focused semi-structured interviews ranging from 60 to 90 minutes are conducted. This approach enables efficient time usage on behalf of both the interviewer and the interviewees. Each of the interviews is recorded as the use of recordings enables detailed data collection and allows the interviewer to focus more on building a better flowing conversation over interesting topics.

The topics of the study can be easily targeted by designing a set of questions to guide the conversation, making interviews an effective data collection method (Yin, 2009). In order to acquire the most relevant information on how customer value could be quantified in the context of selling, the focus of the individual interviews is set on the sales organizations of the industrial companies. All of the interviewees have a relevant background in either the practical use or the development of the value quantification practices of company A. In order to create a culturally and geographically diverse sample, the interviewees are selected from five different countries, including the United Kingdom, Italy, India, Hong Kong in China, and Finland.

The structure and the questions of the interview are designed to target the topics of the study. The structure is first developed and then modified in two sessions with peers that have a background in studying the topics of customer value, value-based selling, and value quantification. Additionally, some topics are added to the interview structure based on the request of a company A representative, who is the contact person regarding the study. The key topics of the interview are the multiple characteristics of customer value, value quantification and communication, the role of the proposed value dimensions in company A's business, and value-based selling in company A. The detailed interview structure is presented in in Finnish in appendix 1 and in English in appendix 2.

The amount of interviews was ultimately determined to be six by the saturation of the interview results. Saturation refers to the interviews repeating the same results with the previous interviews and not providing any real new information (Järvinen and Järvinen, 2000). The interviews were conducted within a two week period from the 5th to the 19th of May 2014. The first interview was held in company A's facilities in Helsinki, Finland, and the other five interviews were conducted over the phone. All of the interviews were recorded after each interviewee was asked for the permission to record the interview. In order to avoid corrupt recordings the interviews were recorded by using two devices, a computer and a digital recorder. The recordings were transcribed within a day after each interview by playing the recorded file in half of the original speed while writing down the content of the recording. After the recording was transcribed, irrelevant discussions and sentences were erased from the transcript to allow for easier analysis of the interview content.

In addition to the interview data collected from company A, the interview material of case company E was received as an additional source of evidence for the study. Case company E is participating in a research that is also a part of the FUTIS research program. In order to increase the quality of the findings of both studies, cooperation was initiated by sharing the interview data. The interview data collected from case company E includes the interviews of 20 employees that are in contact with value-based selling on a daily basis. The relevant interview subjects in respect to the current research included mainly value quantification- and value-based selling-related challenges. Some information on quantification processes and tools was also available.

Participant observation in group sessions

Observations enable behaviours or environmental conditions of a case to be observed and casually or formally recorded in the natural setting of the case

(Yin, 2009). Multiple observers are recommended to be included in observing an event in order to increase the reliability of the observational evidence (Yin 2009). The observational evidence of the current research is gathered in group sessions by having two observers. The observers are participant-observers as they have the ability to ask questions and participate in the conversation, thus also being able to manipulate the event, which creates a bias for this source of evidence. Additionally, broad coverage of the subjects is difficult to achieve through making observations (Yin, 2009). This is countered by continuous note taking during the sessions together with post-session discussion between observers over some key findings of the session. After the sessions the notes are stored in the case study database for further editing and analysis.

Case companies B, C, and D participate in the research by attending the group sessions that are held in the premises of case company A. In each of the sessions both company A and a visiting company present their value quantification processes, tools, and challenges by having open discussion and presentations. The number of employees attending the sessions from companies B, C, and D ranges from two to three representatives, all of which act in a key role concerning their company's activities in sales development and value quantification tool development. Each participant is identified to possess valuable information about the case company's methods, tools, and challenges concerning value quantification.

Documentation

Documentation is a good source of exact information as it can be reviewed repeatedly and it is not necessarily created as a result of the case study but during a longer period of time (Yin, 2009). This study utilizes several types of documentation. First, case company web pages are utilized to gather background information about the case companies. Second, company presentation materials that are meant for external use were used concurrently with the web pages. Third, internal presentations and value quantification tools were viewed in the group sessions. These documents could not be accessed later on due to their sensitive nature, and thus notes were taken regarding their content.

Having multiple data sources and data in different formats leads to the need for multiple analytical techniques that are present in any qualitative research (Strauss and Corbin, 2008; Yin, 2009). The analysis methods and the process through which they are utilized in the current study are discussed next.

4.2.3 Analysis techniques and process

The fourth component of the research design, linking data to propositions, relates mainly to the different analytical techniques selected to reflect the collected data to the theoretical propositions (Yin, 2009), or in this study the findings of the literature research. Analysis is generally defined as raising raw data to a more conceptual level (Strauss and Corbin, 2008). The primary analysis technique used in the multiple case study is the cross-case synthesis presented by Yin (2009). This technique treats each case as their own individual case and aggregates the findings in a cross-case analysis that involves comparison of the findings of each case.

The data collected from the company A interviews was first broken down and labelled under key topics of "value-based selling challenges", "value quantification challenges", "value quantification tools", "communicating value", "characteristics of value", "operational value", and "strategic value". The division of the data was conducted in an Excel worksheet by having the individual interviewees in the rows and the analysis topics on the columns of the sheet, forming a comparison matrix. The comments of each interviewee were simplified and then compared to each other, forming findings concerning each given topic of the study.

The analysis of the group session data was conducted in a similar manner, except that the rows of the comparison matrix consisted of the case companies rather than interviewee names. Additionally, the topics in which the raw data was allocated consisted of "value quantification processes", "value quantification tools", and "value quantification challenges".

As the company E interview data initially had a partially differing focus than the current research, the analysis of the data was conducted with the comparison matrix by having the topics of "value-based selling challenges", "value quantification challenges" "value quantification tools", and "value quantification processes", as these topics were identified to include discussion in the interview data. The findings of the case company were then formed by reviewing and comparing the interviewee statements in the matrix.

The documentation collected in the case study was used mainly to create a context for the case studies and to fill information gaps that existed after interviews or the group sessions.

The key findings of the research were finally formed after creating a cross-case analysis by integrating the topic-wise categorized findings of the interviews, the group sessions, and the external interview data together with the findings of the literature research in a final comparison matrix that enabled

the identification of the origins of each finding, maintaining a chain of evidence. Based on the final comparison matrix the cross case synthesis could be completed, spawning a synthesis of the research findings. Formulating the synthesis included the elimination of non-replicated findings from individual cases to form a more generalizable result.

4.3 Quality of the research

Although the quality of a research is a very elusive concept (Strauss and Corbin, 2008) it can be evaluated with four tests, that have been commonly used in any empirical social research (Yin, 2009). An exploratory case study design needs to maximize the quality of the research through three critical conditions which are construct validity, external validity, and reliability of the study. According to Yin (2009) the fourth test, namely internal validity, is required in explanatory ja causal studies only, and not in exploratory studies, such as this thesis. For this reason the internal validity test is not discussed further.

4.3.1 Construct validity

The construct validity relates to identifying correct operational measures for the concepts being studied (Yin, 2009). In this thesis the concepts of value and value quantification are studied first in literature and again in the case studies. The case studies individually explore the processes, tools, and challenges of value quantification and also test the proposed value construct in the context of one company. The findings of the literature review can be compared to the findings of the case studies to form a measure of each concept being studied.

It is noteworthy that for example the challenges pertaining to value quantification can be limited to the individual interviewees' perceptions concerning the concept. As this case study relies heavily on interview data, the construct validity can be improved by having multiple sources of evidence, such as several interviews together with documents, and ensuring that the interviewees have as much experience about the interview topics as possible. Using multiple sources of evidence is also called triangulation (Hirsjärvi et al., 1997).

It is also important to conduct the interviews in a way that each question is clarified in order to ensure that the interviewees do not misunderstand the questions. Additionally, a part of the data is collected by another researcher to improve the triangulation and to avoid misunderstandings caused by ambiguous questions of a single interviewer. The construct validity of the study is also improved by establishing a chain of evidence during data collection and analy-

sis. Finally, the findings of each case are sent to be reviewed by the representatives of the respective case company for validating the findings and ensuring the quality of the research. The findings of case company E were also reviewed by the original interviewer for further validation of the findings.

4.3.2 External validity

External validity relates to defining the domain in which a study's findings can be generalized (Yin, 2009). As the scope of the research was on global industrial companies from different industries, the study's findings can be generalized only within that dome. Improving the external validity of this study is done through having multiple cases that enable replicating the various findings.

4.3.3 Reliability

The reliability of the study relates to demonstrating that the operations of the study can be repeated to produce the same results (Yin, 2009). Hirsjärvi et al. (1997) propose that this part of research quality is improved by the detailed methodological explanations about how the research is conducted. In this study the research is described together with the reasoning behind the choices that are made in order to enable future replication of the results. The reliability of the study is however limited due to the scope of the study. Ideally, the same amount of interviews should have been conducted to each of the case companies. This would have required an increased scope for the study and was thus not possible to do in this thesis.

4.4 Developing the formal survey

The validity and measurability of the proposed value construct is evaluated in the interviews of case company A. However, the interviews also focus on other topics, making the value construct a secondary priority. Furthermore, the validation of the value construct is not ideally conducted via interviews, but rather with a quantitative survey, as a survey enables having a larger sample, including thousands of respondents, and making a statistical analysis of the results due to the standardized form of data collection (Hirsjärvi et al., 1997). A survey is an affordable method to get information fast from a large set of test subjects (Järvinen and Järvinen, 2000). A central characteristic of a quantitative research is to test theories or logical models (Hirsjärvi et al., 1997) such as the proposed value construct, making a survey an attractive research method. This

is why a quantitative survey is proposed for the use of further research on the subject.

4.4.1 Survey design

The hypotheses concerning the value construct and the different value elements presented in the literature research are transformed into claims that match the original hypotheses in the best possible manner. The first priority of the survey is to test which value elements are perceived to create value to the customer. This test is done in the first part of the survey. The second part of the survey tests whether the value created through each element should be quantified or presented in a qualitative form.

The scale design is used in the survey to let the respondents express the level of agreement or disagreement concerning each claim. Having scaled multiple choice questions makes the comparison and analysis of the survey results fast. Initially a set of 100 claims was designed, but after the survey was validated, first, together with two researchers from FUTIS research program, and second, by two company representatives, the amount of claims was reduced to half of the original amount. The reduction of claims limits the ability to test all the hypotheses concerning the different value elements, but at the same time ensures that the length of the survey remains reasonable. Additionally, the phrasing of the claims was simplified and improved through each of the validation rounds, increasing the validity of the survey results by reducing misunderstandings due to ambiguous framing of the claims (Hirsjärvi et al., 1997).

The biggest problems of conducting surveys relate to the fact that the researcher can never be sure about the level of accuracy of the responses, the number of responses that will be received, the quality of the claims used in the survey, or the actual expertise and knowledge of the respondents (Hirsjärvi et al., 1997). To ensure the quality of the survey, it is thus designed by keeping in mind the guidelines proposed by Hirsjärvi et al. (1997) emphasizing clear, specific, and short questions, avoiding ambiguity, having multiple choice questions, and considering the order and amount of questions together with the choice of words. The survey proposed in this thesis can be used for research as it is, but it can also be further developed in terms of design and wording of the claims. These recommendations are left for the future researchers to consider. The survey is presented in appendix 3 in Finnish and in appendix 4 in English.

4.4.2 Further recommendations

Sample selection is a key ingredient of using surveys in research (Hirsjärvi et al., 1997). As the purpose of the survey is to test the proposed value construct in the context of selling in industrial companies, the ideal sample would consist of a number of experienced sales professionals. The size of the sample depends highly on the objectives of the research and the desired level of statistical significance of the results (Hirsjärvi et al., 1997), and is thus not specified here. It is notable that recruiting and motivating the respondents might be very time consuming, and should be started already in an early phase of the research. A cloud-based service is recommendable for conducting the survey as it provides the results in a digital form, makes follow-up of answers easier, and is also convenient for the respondents.

5. Individual Case Findings

5.1 Case company A findings

The first and most important case of this thesis concerns company A, a global equipment manufacturer and service provider. The case includes six interviews, several meetings with the company contact person, three group sessions with other case companies, and internal material concerning value-based selling and value quantification. The data collected from company A leads to interesting findings that are mostly concurrent with the findings of the literature research. The quantification-related findings of the case are presented in table 3 at the end of this subchapter. The evaluation of the validity and measurability of the proposed value construct is discussed in the end of this chapter after the quantification-related findings of the other case companies have been discussed.

5.1.1 Background

In the beginning of this decade the trends in company A's business were similar to many industries. Increased competition, price pressure, developed purchasing, and commoditization were threatening the players in the market. In order to answer to the challenges set by the market, in 2011 company A started a program to implement a value-based selling approach across the organization. Implementing an approach of this kind could help overcome the challenges of the industry through customer understanding, value argumentation, increased customer loyalty, and value adding solutions. The program included building value propositions, distributing sales support material and several sales tools, and most importantly training the global salesforce. One of the most considerable efforts of implementing the value-based selling program was the development of the customer type-specific value propositions. Due to the nature of company A's business, the customer segmentation is quite complex. The documented target segments included seven different types of markets. Each of these markets included six different types of stakeholders that were present in each of the seven markets. Additionally 15 other stakeholders

were identified across the target markets, including the end users. The multitude of markets and relevant stakeholders lead to the value propositions to include vast amounts of information.

In the beginning of 2014 the program was at a phase where the training concepts and the sales support material were re-evaluated and developed. The program had been implemented globally and the practical experiences of value-based selling had accumulated. According to the interviews, value-based selling has enabled better argumentation and differentiation causing a higher opportunity strike ratio. It has provided price justification leading to better margins, and helped in building more long-term customer relationships. It has also helped in acquiring customers from the market. The global implementation and training of the salesforce together with a systematic approach are perceived as the strong points of the program.

However, value quantification had been generally identified to be the hardest part of value-based selling, and the need for a unified value calculator tool was thus identified. A development project for creating a value quantification tool was initiated in the spring of 2014. The development project was planned to begin by several internal workshops including brainstorming about technologies, platform, and functionalities, followed by idea validation and defining minimum requirements for the tool. The workshops would then lead to the actual calculator tool creation process. The group sessions were conducted in order to support the workshops and ultimately the successful execution of the development project by benchmarking the value quantification practices of the other case companies. The quantification practices and challenges of company A are discussed next.

5.1.2 Quantification process

The documented value quantification process proceeds in a quite similar manner compared to what the findings of the literature research suggest. The simplified process is presented in figure 5.

Figure 5 the quantification process of company A

Discovering needs

First, customer needs are discovered by understanding the customer's business drivers and processes. This part of the process matches value research discussed in the literature. However, as the contact person of company A stat-

ed, before conducting further value research the salesperson needs to make sure that the buying process of the customer is targeted at an early phase in order to promote focusing on value rather than prices. Similarly, the salesperson needs to identify whether the customer provides a relevant opportunity for value-based selling. According to the interviewees the effort invested in value research should be determined by the size of the potential deal. In big projects a deep mapping is required, whereas in smaller projects the existing segmentation and support material should be mostly utilized and the meetings could even be substituted to phone conversations to achieve efficiency.

> *"-- many sales in company A are very short sales. So really the message that we're also trying to get across is that even in smaller cases, value can be suggested. In that situation it is not possible for a salesperson to necessarily sit down and work out the value, for every customer."*
>
> *- Interviewee 4*

An important task to consider in the first phase of the quantification process is the investigation of the customer's internal hierarchy. Most interviewees agreed that understanding the customer's hierarchy enables finding out who the decision makers are and lets the salesperson focus on the right person. As Kaario et al. (2003) state, focusing the sales effort high enough will ensure access to business processes, information, and data, all of which are important for the successful execution of value quantification.

> *"The first thing is that we always try to get in touch with the decision maker as soon as possible. We don't only talk to people on a lower level wherein they are not decision makers. -- When we have an account plan for a particular customer, we know who is the decision maker, who is next to him, and who is the one who will be handling orders. It's customer hierarchy mapping. So we know who to actually go and see or talk to."*
>
> *- Interviewee 5*

In order to have dialogue and ask the right questions from the customer, the salesperson needs to have a pre-understanding of the customer's processes, their culture, and buying behaviour. This pre-understanding can be created by using existing value propositions, process training videos, and conducting ad-

ditional background research. However, the interviewees emphasized that although the value propositions include sets of standard values that are helpful in creating the basic understanding of a customer group's needs, the customer's value drivers are always firm-specific. Thus, the dialogue between customers is seen as irreplaceable as it creates trust, sheds light to the unique situation of the customer, and can even reveal information about competition, all of which help the quantification effort. As interviewee 2 put it, a better understanding creates the basis for offering exactly what the customer needs and has the budget for, and if the total cost of ownership is not high on the customer's agenda, then the salesperson should not make it high on his. Thus, identifying the salient value elements and the most important metrics that measure the value is seen as important in company A's business. Additionally, understanding the competition helps to choose the most differentiating arguments.

In conclusion, sometimes a large amount of pre-research is required before meeting the customer. Value propositions act as a great tool for creating pre-understanding, but a deep dialogue with the customer is essential in order to be able to identify key decision makers, the salient value elements, and the desired business impacts to quantify and communicate later on.

Aligning the offering

Based on the information that is gathered in the value research, the offering of company A is aligned to achieve best relevance and timing. Several interviewees stressed that in addition to understanding the customer, the salesperson needs to understand company A's own offering. Understanding the own offering provides the means to create value to the customer and is thus a prerequisite for effective selling. Without understanding the offering, a salesperson cannot align the offering to match the customer's needs, which is required for successfully selling value, or understand the mechanism of creating the value, which is critical for being able to quantify it in a credible way.

Quantifying the impact

Once the prerequisites for the actual value quantification are accomplished, it is time for the salesperson to quantify the business impact of the offering. Value quantification makes the value concrete and is thus seen as essential among all of the interviewees.

> *"Quantifying value is critical. It's absolutely critical whether it's total cost of ownership, whether it's risk, whether it's safety, whether it's regulations, or whether you're making some safety upgrades."*

- Interviewee 2

Interviewees 3 and 5 explained that it is important to first create an initial picture for the customer by using external reference values, which can then be brought to the customer's context by adding the customer-specific facts and information. This approach can increase the amount of dialogue with the customer, which is seen to be very important by the interviewees as it metaphorically opens a window to the customer's world. However, the provision of an initial calculation was not seen as a must among other interviewees.

It is also beneficial to quantify value in different areas of the customer's business as it sends a message about value being created in several different ways, again leading to increased dialogue with the customer.

> *"-- when we use separate value sources, we are actually telling the customer that you are getting benefits in all these places. Not just one. -- It's a better chance for us to debate and talk to the customer, to bring a dialogue into place. This dialogue will actually help us understand the customer's requirements better."*
>
> *- Interviewee 5*

The calculations should be as transparent as possible and validated together with the customer to increase rapport. When using assumptions in the calculations, they should be clearly communicated to the customers. Real life reference cases and hard facts are seen as valuable inputs in quantification as they act as undeniable evidence and help prove the value delivery potential of company A.

Furthermore, comparison with the existing solution or with competitors' solutions is also generally seen as beneficial in quantification. Comparing the benefits of the offered solution against an existing solution is perceived to increase the effectiveness of selling. On the other hand, understanding the competitors' offerings and using comparison is important in order for the salesperson to also know how to differentiate from them. Interviewee 5 stated that in their country competition analysis material is systematically prepared for this exact use.

According to the documentation, company A promotes the use of value aggregation by proposing four key metrics through which the business impacts can be measured and presented to the customer. First, the possible revenue

increases of the customer's business can be assessed. Second, the decreases in total cost of ownership are identified as a source of customer value. Third, minimizing the customer's capital requirements is considered a key metric. Finally, the possibility to reduce customer's risks is also among the key metrics. It is noticeable that the first three metrics have been suggested in the literature by Kaario et al. (2003) and the last metric by Töytäri and Rajala (2014). Therefore each of the metrics utilized for measuring the aggregated monetary value coincide with the findings of the literature research.

Most of the interviewees mentioned that monetary value and savings are generally the most important aspects of value for the customers. However, the economically measurable value is not the only value desired by the customers. Quality, safety, risks, emotional value, and other intangible sources of value are also identified to have an effect on customers. These types of value are not easily quantified or translated into monetary terms. Thus, many of the interviewees suggested that the total aggregation of value is not necessary, as it is often too time consuming and difficult, and might even blur the total message of the offering. Instead, a clear picture of the whole offering needs to be created together with presenting the value in concise parts that can be easily understood and explained.

> *"Aggregating value into a single number is challenging especially if generating that number is a complex process. I think the customer needs to be walked through a story, so that they can understand the individual value elements one at a time. The significance of the value creation potential can then be discovered together in the end."*
>
> *- Interviewee 1*

Communicating the value

The final step of the process is to communicate the value after it has been quantified. Most of the interviewees stated that the communication of value should be continued throughout the entire quantification process. This way the quantified value is also validated more thoroughly as the customer has a good idea of the logic behind the quantification. Just like in the value research stage, dialogue should be promoted in presenting and validating the quantification results as well. The calculation logic and all utilized assumptions should be made clear to the customer to promote trust and transparency.

The company documentation also puts emphasis on communicating in the customer's language. According to the interviews, the meaning of this is main-

ly to communicate in terms of relevant sources and manifestations of value. Talking about subjects that the customer is really interested in is thus important.

> *"When you look at any of my e-mails to my customers, it's in their language, not mine. I talk about their OPEX. I talk about their CAPEX. I talk about this, I talk about that. Because it means something to them."*
>
> *- Interviewee 2*

Most interviewees agreed that communicating the most differentiating value drivers is important, and that four to five key elements are enough. Thus, the communication should revolve around the salient value elements and the most relevant business impacts concerning the customer, which is also supported by the research of Töytäri et al. (2011).

5.1.3 Quantification tools

The interviews covered some of the individual tools used for quantifying value but none of them were available for further examination in this research. As the calculations are made individually for each customer, the usage of Microsoft Excel was mentioned by several interviewees. These Excel tools are easily modifiable and used separately by each country's sales organizations. Two industry-specific calculators were also mentioned by the interviewees, both of which are very useful in simulating the effects of company A's offerings. However, these calculators cannot be disclosed due to confidentiality. In addition to these calculators, the interviewees mentioned budgeting tools that are used to calculate project-related costs and maintenance costs. Finally, as mentioned before, the interviewees identified reference cases to provide undeniable evidence of the value creation ability and to create trust. The reference cases are presented mainly in sales presentations.

> *"There should be a validation of the fact that this has been done in the past for a certain customer who has perceived value. It is good to build a database of these examples. -- Word-of-mouth is the best tool you can have. It doesn't matter which market you are in."*
>
> *- Interviewee 6*

The documented material received from company A does not include any information concerning the aforementioned quantification tools. However, the documented tools include the segment- and customer-specific value propositions and two frameworks for aggregating and communicating value.

The value propositions are mostly used in the first two steps of the quantification process of company A. They include vast amounts of information, including key concerns of given stakeholders and the corresponding solutions at each step of the entire process that company A's business is targeting. According to the interviews the objective of the value propositions is to act as supportive material that the salesperson can use in order to get acquainted with the context of a customer.

> *"The thing is, the prepared material (value proposition) is just a pointer. It is not the value proposition which the salesperson will be actually giving* to the customer*, but it is just a pointer to tell the salesman what the customer is more inclined to."*
>
> *- Interviewee 5*

The contact person of company A pointed out that the value propositions are not meant to be studied inside out, but more importantly used for creating a pre-understanding of a given customer type in a specific segment. This was also confirmed by most of the interviewees. This way it is easier for the salesperson to identify the key business drivers and salient value elements for the customer. Also, adjusting the offering to match the targeted phase of the customer's process is supported by the information provided in the value propositions. As the value propositions are developed globally, they were initially distributed to the sales organizations of each country for further adaptation relating to the specific characteristics of the given culture and markets.

The frameworks for value aggregation and communication included presentation templates for effectively presenting the benefits of the offering to the customer. The aggregation framework is used in the third phase of the quantification process to quantify value. It includes the four key metrics for measuring customer value. The proposed offering, its benefits, and the monetary value are presented separately for each of the metrics. Furthermore, the framework enables a simplified comparison to be made with competitive offerings. In this tool company A is applying both of the ways of comparing value proposed by the literature. First, the monetary value for the customer is calculated

in comparison to the baseline situation, and second, the value creation potential is compared to the competition.

The last tool is the customized value proposition framework that enables clear communication of value. The framework is similar to the aggregation framework, but it is designed to include more text rather than just numbers. The framework is mainly used in the fourth step of the quantification process to help communicate the value to the customer.

According to interviewee 4, company A's sales training focuses on the means of quantifying and communicating value, but the tools are not at any point force fed to the salespeople. This creates the possibility for each person to utilize the tools that they are most comfortable with. Interviewee 2 summarized the discussion on quantification tools well by saying that competence and attitude create success, and the tools are there to help the salesperson succeed. However, having tools can be an asset when countering the challenges of value quantification. These challenges are discussed next.

5.1.4 Case challenges

Multiple challenges relating to quantification were identified both from the interviews and the group sessions. The challenges are categorized to general challenges, salespeople-related challenges, and customer-related challenges.

General challenges

The most obvious general challenge is the utilization of the information heavy value propositions. As the value propositions include processes, areas of interest, and other relevant information concerning each stakeholder in each segment, they form a big database of information packed presentations. All of the data sources of this research confirm the challenge of utilizing these value propositions due to the overload of information. The materials are meant to be localized, or in other terms customized by each country's sales organization to suit the needs of the given country. However, localizing the materials has been challenging as the country organizations have not had time for developing the tools or documents. The company contact person stated that management buy-in has had an important role in the successful localization of support materials.

> *"Localizing the materials is a problem in the country organizations as there is so little time to do any development tasks. The material that has been prepared globally is too heavy to use.*

The simplification of the material is left completely for the country organizations to do, which in my opinion is a challenge."

- Interviewee 1

Secondly, according to some of the interviewees, different countries utilize different methods and tools for value calculation. Furthermore, the quantifications are made individually for each customer, creating a need for a simpler and less time consuming tool for making the customer-specific value calculations.

Some comments regarding the value communication material revealed that there is also a need to make material available for the customer to sell internally, promoting the offering of company A to other stakeholders and possible decision makers. The materials that are used are often too technical for the customer to use. This was an interesting and useful notion that was not explicitly mentioned in the literature.

Finally, the interviews concluded that value-based selling requires more skills and knowledge from salespeople, and that the shift from traditional product pitching towards selling and quantifying value has proved to be a real challenge. Interviewee 4 stated that old habits die hard, meaning that many salesmen still go into the meetings already knowing what they are going to offer without listening to the customer first. These salesmen focus on selling, selling, and selling, instead of listening, understanding, and convincing.

"Actually listening and taking in what the customer's saying is one of the hardest things that we salespeople have to do. It's sitting and listening to the customer and really getting to the core of what they're looking to do and what drives them, what their targets are and how they work, and how we can work with that. Without that information it's very difficult to communicate value in a substantial way"

- Interviewee 4

Many of the salesmen have also been using their traditional methods without problems for decades, and are thus hard to convince that reformation is needed. The change resistance of salespeople is also identified as a problem by a company A representative in the second group session. Converting the salespeople that are against the change has been found to be very challenging.

Additionally, some of the interviewees even felt that value-based selling might be seen as a trend among the salespeople, and for that reason can be challenging to implement. Many interviewees agreed that the value-based selling mentality could and should be spread across the entire organization.

> *"We need the same global focus. -- Company A needs to have the value set as a part of its DNA. Not as an afterthought. -- Value needs to be on every poster, it needs to be on everybody's screen saver."*
>
> *- Interviewee 2*

The common mentality is seen to highly support the creation of customer value, which on the other hand is identified in the literature as a prerequisite for suppliers to achieve competitive advantage (Khalifa, 2004; Ravald and Grönroos, 1996; Töytäri et al., 2011; Woodruff, 1997; Yang and Peterson, 2004)

Salespeople-related challenges

Many interviewees identified the problem of value research and quantification requiring lots of resources and time, which causes a practical challenge of not having time for selling multiple simultaneous projects. Larger projects demand for a deeper level value research, which is also justifiable by the size and potential margins of the project. However, in the case of smaller projects the salesperson has to prioritize and simplify the value research process, making also the building of trust very difficult.

Many salesperson-related challenges were identified to originate from the competences and habits of the salespeople. In traditional selling a salesperson could present the details of the offering and propose a price, which requires little skills or knowledge of the offering, the customer, or the competition. In order to execute the quantification process in the context of value-based selling, the salesperson has to be able to identify relevant opportunities, do background research on the customer, network within the customer's organization, have deep and meaningful dialogue about the situation and needs of the customer, and work in cooperation with the customer to build trust and rapport. The lack in these skills and abilities is identified as a major challenge in company A.

First, not being able to identify relevant opportunities or target the buying process of the customer at an early phase is identified as a challenge. The company representative explained that being forced to compete with prices is typi-

cal when the salesperson gets involved in a project in its later phases. This problem is usually avoided by getting involved early, and thus being able to deal with different stakeholders that are more interested in other value, such as quality, aesthetics, and total costs or ownership.

Second, mapping the customer hierarchy is deemed very difficult, especially in smaller projects. This problem can cause more resistance from lower level decision makers, and thus, hinder making the deal (Kaario et al., 2003).

Third, the salesperson needs to understand the own offering in order to create value to the customer. Multiple interviewees agreed that many salesmen do not possess a deep enough understanding of the company A's offering they are selling, as they might be originally from another industry or not possess any technical skills or knowledge.

Fourth, not being able to understand the customer can easily lead to the salesperson not being able to address the customer's business drivers and needs in order to convince the customer. This challenge relates to not conducting sufficient value research, but also to the competences of the salesperson in being able to see the big picture and link information from several sources.

> *"-- it's very good to highlight value, but you can highlight all the values and every feature and benefit that there is of all the solutions that we have, but really it's down to the individual salesperson's ability to understand the customer and their drivers, and that's the difficulty."*
>
> *- Interviewee 4*

Fifth, especially when the salesperson doesn't have enough time to allocate to value research and quantification, the building of trust can be unsuccessful. Building trust is seen as a challenge by the interviewees as it takes time and also depends largely on the interpersonal relationships between the salesperson and the customer's representatives.

> *"Building trust is a difficult one. It's down to the amount of time the salesperson has and can spend with the customer."*
>
> *- Interviewee 4*

Finally, quantifying value also requires calculative capabilities, not typically possessed by traditional salespeople (Kaario et al., 2003). This challenge was also identified to concern company A as some salespeople are not capable of

quantifying value or presenting facts and numbers independently, but would need the help of well-designed tools. Many interviewees stated that creating and using concrete evidence and numbers in practice is very difficult.

> *"The major challenge for me is being able to actually put some hard concrete against any type of quantification."*
>
> *- Interviewee 2*

The easiest forms of value to quantify were identified as monetary cost savings. Despite the fact that they are good sales arguments, emotional value, aesthetics, experiences, safety- or risk-related value, and other intangible sources of value can be really hard to present in monetary terms or to quantify at all. On the other hand, some value is influenced by a large number of factors and would lead to complex calculations with lots of assumptions. Interviewee 1 stated that too scientific and complex calculations can cause mistrust on behalf of the customer, and should thus be avoided. This creates a challenge because according to many of the interviewees, it is hard to sell value without any proof or evidence, which the quantification of value aims to provide in the first place.

Customer-related challenges

As not being able to build trust with the customer was identified as a salesperson-related challenge, the customer's lack of trust, on the other hand, is identified as a customer-related challenge. It is one of the most important challenges, as it can lead to the unwillingness to share information or invest resources in the quantification effort, which are both challenges also identified by the literature research. Additionally, the customer might also be unable to share the information, data, or resources. Reasons for this can include dealing with the wrong person with no knowledge of the subject or a lower level manager with insufficient power.

Some additional customer-related challenges are identified to relate to the industry and markets of company A. The first challenge relates to the fact that the customer that company A is dealing with might be aiming at acquiring the lowest cost offering in the short run instead of looking after the end-users interests. This situation can lead to the focus of the buying process to be mainly on price comparison, making the value quantification effort ineffective. This problem also relates to the multiple stakeholders and customer types that are present in the projects company A's is dealing with. The interviewees argued that sometimes it is a real challenge to manage and try to fulfil the different requirements set by multiple stakeholders of the project.

Development ideas

Derived from the interviews, a common agreement was found over the need for having a tool to make value-based selling and value quantification fast and easy for everyone.

> *"We have various tools, but what we need is an end-to-end tool that considers all the value of our solutions"*
>
> *- Interviewee 6*

The tool should preferably enable automatic calculations based on input information defined in cooperation with the customer. Additionally, the heavy segment and customer type information together with reference case data, industry averages, and other information relevant for the calculations, should all be stored in databases that are connected to the tool. The dialogue with the customer could be made easier by designing the tool to guide the conversation by requesting necessary information about preferences. Some suggestions were made about the tool being an iPad application with a simple user interface. Instead of inserting data into a complex Excel file, this approach could spark more trust in the customer. Finally, the tool should enable printing out the offering details and quantification results, for example in a PowerPoint presentation or a Word document, for the customer to use in selling the company A's offering internally. Developing a tool like this could counter many of the salesperson- and tool-related challenges faced by company A.

> *"We need to provide the tools to support our value articulation because our customer doesn't understand the true value of company A. It's that simple."*
>
> *- Interviewee 2*

Other relevant development suggestions included increasing practical exercises to boost the salespeople's confidence and to develop routines. The importance of value as a sales argument and a way of doing business should also be clarified. Due to the powerful influence of reference cases many of the interviewees felt that collecting more value case histories and customer reference videos could help salespeople in their efforts. Additionally, some interviewees felt that global marketing material did not support the value-based selling approach in the best possible way and should be aligned accordingly to support the success of company A's business.

Table 3 the quantification-related findings from company A

Topic	Quantification-related findings from company A
Process	**Discover the customer's needs** • Identify relevant opportunities and target the customer's buying process early • Study value propositions and conduct background research • Investigate customer's hierarchy and focus efforts on decision makers or influencers • Understand the customer's business drivers, processes, and needs • Identify salient value elements and the most important metrics for measuring value • Study competitors to identify how to differentiate from them **Align the own offering** • Understand the value creation potential of the own offering • Align the offering according to the customer's situation and needs **Quantify the business impact** • Gather data from the customer and create assumptions • Calculate the value creation potential by using salient value elements • Aggregate monetary value by using the predefined metrics • Compare results to baseline situation and competition **Communicate value to the customer** • Communicate value throughout the entire process and focus on differentiating elements • Present and validate the quantified results with the customer • Promote dialogue and clarify assumptions and calculation logic • Use reference cases to provide further evidence of the value creation ability
Tools	**Utilization of tools** • Calculators are used for calculating the value creation potential of an offering • Reference cases are used to provide evidence of the value creation ability • Value propositions are used to provide information about different customer types • Two frameworks are used to help value aggregation and communication **Format of tools** • Several Excel-based calculator tools, industry-specific calculators, other budgeting tools • PowerPoint-based reference case presentations, value propositions, and frameworks **Functionality of tools** • Independent calculations are conducted with Excel spreadsheets • Calculators include offering and industry-specific calculation logic to produce results
Challenges	**General challenges** • Value propositions are information heavy and impractical to use • Localization of support materials not completed as planned • Several tools and globally fragmented methods for quantifying value • Lack of other than technical material available to be left with the customer • Countering change resistance and training value sellers is difficult **Salesperson-related challenges** • Lack of time to conduct sufficient value research and quantification • Not being able to identify relevant opportunities • Not being able to target the customer's buying process at an early stage • Not being able to identify decision makers in the customer's management hierarchy • Not being able to understand the value creation potential of the own offering • Not being able to understand the customer's business and needs • Not being able to build trust with the customer • Not being able to quantify and communicate value in a credible way **Customer-related challenges** • Lack of trust in the supplier or the salesperson • Unwillingness to share information and data • Unwillingness or inability to invest resources in the quantification effort • The customers do not always consider the owners' and end users' benefits • Requirements set by multiple stakeholders are difficult to match

5.2 Case company B findings

Case company B delivers large industrial solutions and lifecycle services across the globe. The company's deliveries include large equipment and structures, and have to be delivered or even built or assembled in the customer's location. Only a portion of the business can be considered standard equipment or services, which naturally sets limits to the level of productization. The offerings need to be tailored to meet detailed customer requirements and various local standards. The sales process can last for years, which means that there is sufficient time for quantification to be conducted and if the sales case timeline permits, the company is able to create alternative solutions and compare their value creation towards the customer requirements.

Two representatives of company B took part in a group session, in which value quantification-related issues were discussed. As the discussion of the group sessions was not formally guided, each session had a differing focus. Most of the discussion in this session concerned the value quantification tools and their development in company B. The quantification-related findings from company B are presented in table 4 in the end of this subchapter.

5.2.1 Quantification process

As mentioned previously, the sales process of company B can last for years due to the nature of their business. The company representatives stressed that when dealing with projects like these, the customer relationship is especially important in order to understand as soon as possible whether the project offered by company B is a priority to the customer or not. If it is a priority, company B then assigns resources to the project based on its priority classification. If it is not, the opportunity is not passionately pursued. Company B had mapped their customers' process of executing projects from conception to implementation, and designed their sales process accordingly. This allows them to target the customer's process at the appropriate time. Like in the case of company A, targeting the early phases of the customer's process has proven to be beneficial in terms of successful value-based selling and value quantification.

The actual quantification process was not thoroughly discussed, but was explained to involve the use of a tool that was used to support the building of the sales case, and is linked to the CRM of the company. The tool included basic information, client information and segment identification, scope of the project, bid evaluation, sales strategy selection, and the result of the quantification effort. The tool seemed to be heavy to operate as it included many detailed

aspects of the sales case, but keeping in mind the long duration of the sales project and the large scope of the offering, gathering the necessary information is perhaps not a problem. The salesperson needs to understand the customer's value chain, value creation processes, and salient value elements and know how to align the offering to address the customer's needs. Several customer meetings are conducted in order to get enough information and data for calculating the potential business impact.

The final result of the quantification is usually presented in monetary value regarding how much the project will generate annually. It seemed that in company B's industry other intangible value, other than safety-related value for example, does not have a large emphasis, or at least did not come up in the conversation. Thus, the quantification mainly focuses on the economic, risk-, product-, service-, and process-related value elements of the offering.

Company B has additionally been able to conduct value-based pricing. The pricing model is based on the cost estimate of the offering which is then modified by adding a mark-up that depends on different drivers that are present in the customer's situation and the proposed offering. Finally, the total price is presented to the customer with a few of the biggest drivers affecting the price being explained.

In order to achieve the quantification result and proposed price, multiple value calculators are utilized. A one-size-fits-all calculator has not been developed as the delivered projects and the situation of their customers are always in some ways different. This leads to using general tools instead of accurate simulations. The company representatives explained that the aim of the quantification development is to obtain a process-oriented view of the customer. In the future the goal is to thoroughly understand the value chain and processes of the customer in order to design value quantification tools accordingly.

In addition to developing their sales process and tools, company B also started a value-based selling skills training program some years ago. The objective of the training is on achieving a behavioural change in the sales people. This means getting them to demonstrate benefits and value to the customer instead of discussing product features and advantages. The focus of the training program is mostly on behaving in real life situations and the practical use of the different value calculators is only briefly discussed in the training sessions.

5.2.2 Quantification tools

The current tools that are used for quantification are mainly Excel-based calculators. Two of the main tools were discussed and presented. The first one

was designed to calculate the amount of value the project will produce annually for the customer. The calculations were based on information about how much it would cost to change the old solution to the new offering, and how much monetary value the new offering would create per day. The calculations included multiple variables that were industry-specific and cannot be further discussed. The second tool included the calculation of lifecycle costs of the offering, which can be concluded as important for the customer. This tool utilizes a database that offers basic information and variables concerning the offerings of company B. With the use of these tools the company sales representatives are able to produce basic value quantification in monetary terms, which can be sufficient for the customer. Both of the tools together with other available calculators are used separately and manually, requiring the salesperson to possess skills and knowledge in using them and aggregating the created value.

However, as mentioned before, the aim of the company is to obtain a process-oriented view in value quantification. The company representatives also mentioned a recently initiated development project concerning a new and customer friendly quantification tool. The basis of the tool, according to one of the representatives, is that although each customer has a unique value creation process, they are somewhat similar to other processes of companies within the industry. Thus, the aim of the newly developed tool is to simulate the value chain and value creation process of the customer, including identifying the elements of value at each point of the process. Typical value chains and processes are stored in a database and selected for the quantification based on the inputs and outputs of the specific customer's value creation process. The concrete development timeline of the tool was not specified by the company representatives.

5.2.3 Case challenges

Company B has encountered several challenges, out of which the perhaps most obvious is the vast amount of different value calculators. The many tools seemed to be very laborious to use and include some overlapping functions. The need to tailor most of the company's offerings sets limits to the tools that would benefit from having productized offerings, making tool development more challenging. The company representatives admitted that there are many different calculators that are calculating the value in much detail, and are thus hard for the salesforce to use.

Due to the tailored and complex offerings, most of the tools also require large amounts of data, creating some challenges with data acquisition. The

cost estimate of the tailored solution and delivery model must be intimately known before value can be quantified or value-based pricing can be applied. However, according to the company representatives the customers are often not willing to share sensitive information, leaving company B with insufficient data for the value calculations. This problem can relate to a lack of trust in the supplier.

The company representatives also mentioned that there have been various initiatives and development activities going on in terms of selling. The company-wide sales process had been implemented only recently, and the wide variety of sales tools has probably not helped in getting used to common procedures. Other sales-related challenges include ad hoc projects and other projects in which the customer's buying process is targeted in a later phase. In these projects the propositions have to be made in a fast pace, which leads to a smaller hit rate, and thus, wasted resources. The problem is similar to the one encountered by company A. Both companies feel the need to focus mainly on the early phases of the customer's buying process to increase the hit rate and to provide improved value adding offerings.

Although the discussion over different challenges was not very long, the generic challenges faced by company B seemed to include similar topics with case company A. As a difference between the two, company B has been more tool oriented in their approach to value-based selling, which has lead them to have multiple tools that are not utilized to their maximum potential. The tool development project might bring some kind of a solution to this problem.

Table 4 the quantification-related findings from company B

Topic	Quantification-related findings from company B
Process	**Gain understanding of the customer's situation** • Identify relevant opportunities for value-based selling • Target the customer's buying process at an early stage • Map the customer's value chain and value creation processes • Identify salient value elements and business drivers • Continuously gather data and information from the customer **Assess the value creation potential** • Align the offering according to the customer's situation • Utilize value quantification tools to calculate the value creation potential • Utilize value-based pricing tools to set the price of the offering accordingly **Communicate the value and the price to the customer** • Present value creation potential, key value drivers, and price of the offering
Tools	**Utilization of tools** • Several calculation tools are utilized to calculate value creation potential and to conduct value-based pricing • Calculations are made independently based on the gathered information and data **Format of tools** • The calculators are Excel-based tools **Functionality of tools** • Calculators include industry- and offering-specific calculations • Calculation results are presented in monetary terms and compared with the base-line situation • The tools are also linked to databases and the CRM to enable information transfer
Challenges	**General challenges** • Too many different calculator tools have been developed • Calculators have heavy calculation possibilities and overlapping functions • The industry sets limitations to the development of value quantification tools **Salesperson-related challenges** • Adjusting to the recent implemented common sales process takes up time and effort • Lack of skills to conduct value calculations • Not being able to target the customer's buying process at an early stage **Customer-related challenges** • Lack of trust in the supplier or the salesperson • Unwillingness to share information and data

5.3 Case company C findings

Company C is a large provider of technology and industrial services, and has operations across the globe. The group session held with company C representatives did not focus on any of the topics in particular. The quantification-related findings from company C are presented in table 5 in the end of this subchapter.

5.3.1 Quantification process

Company C explained that their background research concerning value-based selling had been done more loosely than in the case of company A. The company representatives explained that in their business value is calculated case by case, mostly targeting cost savings or the monetary value of increasing the customer's production potential. When a new solution is introduced by company C, example calculations of the value creation potential are made. However, applying the calculations to each sales case has not been as successful as the representatives would have hoped for. In addition to calculations, examples and reference cases are used to communicate value to customers.

According to them the key to successful quantifying is to know who the salesperson is dealing with and speaking in their language. When talking to a decision maker, it is important to know where the customer's costs are generated and to talk about financial impacts. Additionally, it is important to communicate value to a wide audience within the customer's organization. This concerns management, production, maintenance, and other functions related to purchasing and operating the offering. Challenging the customer's perception of value and other offerings is crucial as it can promote the customer's interest in new solutions. However, the effects of challenging the customer are very dependent on the culture and the individual who is being challenged, and thus, challenging the customer does not work in every case.

The group discussion did not reveal the detailed process that company C utilizes in their value-based selling and value quantification, but the basic elements of gaining customer understanding, identifying decision makers, quantifying value with calculators, using reference cases, and communicating the value in the customer's language are identified.

5.3.2 Quantification tools

The main quantification tool used in company C was an Excel-based calculator. The use of the tool is simple and takes only a few minutes. The calculator enables the user to choose which elements of value are included in the calcula-

tions, helping the adaptation of calculations to specific cases. However, applying the calculator to specific products or solutions requires competence. It is thus crucial that the salesperson understands the effects of the company C's offering and can simulate the changes with the calculator.

The nature of company C's offering enables focusing on the cost aspects of the value. This focus on the other hand enables for logical calculations to be made due to the business revolving around technological equipment and standardized processes that provide precise data and information for calculations.

5.3.3 Case challenges

One of the most relevant challenges concerning value quantification is that the utilization of the value calculators requires a lot of competence from the salesperson in terms of understanding the customer, understanding the own offering, and knowing what value is being created and where it occurs. However, there are multiple general challenges of value-based selling that create problems for value quantification as well. For example, not having complete management buy-in has been identified as a challenge for successfully exercising value-based selling. The focus of management is often in the large projects and the pressure put on salespeople to close deals is constant. The company has also had internal fragmentation concerning value-based selling practices. The representatives explained that value-based selling is about creating trust, but not everybody wants to do it or knows how it is done, which creates a challenge regarding the own salesforce. Additionally, as an external challenge, the representatives argued that it can take a long time for customers to understand the potential benefits of a given solution. Until this point is reached, the customer will argue against the solution. Sometimes the customer and opportunity selection plays a key role in successful value-based selling, as the customer's focus might sometimes be too difficult and time consuming to convert from traditional views to business impacts.

Overall the challenges of company C revolved around the same topics as with company A. Applying value-based selling and value quantification successfully requires the management to drive the execution and development of processes, tools, and support material, together with the salespeople being competent to promote trust, identify relevant opportunities, understand customers' needs and the effects of the own offering, and quantify and communicate the value created with the offering. Shifting the focus of customers can prove to be chal-

lenging, but can become easier in the long run through the development of industry standards and practices.

Table 5 the quantification-related findings from company C

Topic	Quantification-related findings from company C
Process	**Gain understanding of the customer's situation** • Identify relevant opportunities for value-based selling • Identify decision makers and network within the customer organization • Understand the customer's business processes and cost drivers • Challenge the customer's perceptions of value • Gather data and information for quantification **Assess the value creation potential** • Utilize value calculator tools to quantify the value creation potential **Communicate the value to the customer** • Communicate value to a broad audience within the customer organization • Communicate the value in the customer's language, usually in monetary terms • Use reference cases to provide further evidence of value creation ability
Tools	**Utilization of tools** • One main calculator tool is used to calculate the value creation potential • Value case histories are used to communicate the value creation ability **Format of tools** • The main quantification tool is an Excel-based calculator • Reference cases are used in presentations **Functionality of tools** • Calculators include offering and industry-specific calculation logic • The calculator mostly calculates the value in terms of aggregated cost reductions • The calculator enables the selection of salient value elements
Challenges	**General challenges** • Lack of management buy-in in value-based selling and value quantification • Internal fragmentation concerning value-based selling and value quantification practices **Salesperson-related challenges** • Not being able to identify relevant opportunities for value-based selling • Not being able to understand the customer's situation and needs • Not being able to understand the value creation potential of the own offering • Not being able or motivated to build trust with the customer • Lack of skills and knowledge to calculate value • Lack of time to conduct value research and quantification **Customer-related challenges** • Lack of trust in the supplier or the salesperson • Not being able to see the benefits of the offering

5.4 Case company D findings

Company D represents one of the most recognized brands of a global industrial company. The brand's offerings include industry-specific technical solutions and services. The focus point of the group discussion with company D was clearly on the quantification process. The quantification tools were not presented or discussed in detail, and are thus addressed in the discussion over the process. The quantification-related findings from company D are presented in table 6 in the end of this subchapter.

5.4.1 Quantification process

One of the key points made by a company D representative about successful value-based selling was that solution business supports the approach better than product business. This relates to the fact that solution business enables spending more time to execute the steps of selling value instead of pitching products and competing with prices. Selling products has been successful as the operations of the company are lean, thus enabling profits to be made by selling at market prices. However, the new strategy of the company focuses on selling value. In the industry of company D the value sold to the customer mainly manifests through added revenue, which separates it from the rest of the case companies. Company D aims at creating the value by also supporting the customer in appropriately utilizing their offering in addition to just delivering it.

According to the representatives of company D the front line of sales consists of mostly lead hunters that aim at identifying relevant opportunities, which is step one of the value-based selling and value quantification process. Once a potential opportunity is identified, value research is applied in order to understand the customer's situation and needs. Additionally, the decision makers and influencers are identified and targeted. The representative in charge of the business explained that selling must also be aimed high in the management hierarchy from the beginning, meaning either the CEO or the CFO of the company, and not the technical managers. Once the value research is done, the key drivers of value are linked to the KPIs of managers and other relevant actors in the customer's business.

The next step is to simulate the earning case. This is done by using a quantification tool that presents the net present value of the offering in the customer-specific use. The systematic development of the tool began in 2008 and the representatives argue that today company D is the only company in their industry to be able to quantify the value of their offering in such detail. Quantify-

ing the value begins by creating an estimate of how much value company D is able to create for the customer. After the initial estimation, the specifications of the customer's system are added to the simulation, creating an accurate simulation and description of how the value is created. In order to view these findings, the customer is required to sign an NDA. Presenting the detailed value creation methods can help to communicate the value in a credible manner. The representatives of the company explained that it is important to commit to the message that is being conveyed to the customer or otherwise the customer will not believe it. They believe that providing evidence of how the value can be created, and in what quantity, is essential for successful value-based selling. However, despite the necessary NDA, revealing the detailed solutions and their applications can create a potential hazard of having leakage of the supplier's proprietary information.

5.4.2 Case challenges

The discussed challenges did not have a lot to do with quantifying value per se. They focused mainly on managerial issues related to change and the implementation of value-based selling. As the shift in strategy requires a change in the sales approach, some salesmen are having difficulties adapting and some are doing better. Additionally, managing the product and solution businesses simultaneously is also creating managerial challenges in their business.

Like in the case of company A, the industry itself creates a major challenge. The customers of company D are not usually the end users, who on the other hand are the main beneficiaries of the value created with the offering. Thus, the actual customer might already have the fixed price order for a project from an end user, and is now trying to execute the project with minimal costs by using industry standard solutions. As company D offers a new type of a solution, which can be more expensive to invest in, the customer might not have the incentive to acquire a better solution at the expense of their own margins. Thus, changes in the industry could make business easier for company D, but until they happen, the company has to deal with the same problem of trying to target the purchasing process early on to influence the customer's requirements and what they are looking for. Additionally, getting in contact with the customer's higher management, gaining the customer's trust and willingness to cooperate, and ensuring that the customer is convinced of the value creation ability of company D are major value-based selling- and value quantification-related challenges faced in this case as well as the other cases.

Table 6 the quantification-related findings from company D

Topic	Quantification-related findings from company D
Process	**Gain understanding of the customer's situation** • Identify relevant opportunities for value-based selling and target the customer's buying process early on • Investigate customer's hierarchy and focus efforts on higher management • Understand the customer's processes and needs • Identify most important value drivers and link them to the customer's KPIs **Assess the value creation potential** • Create an initial estimation of the value creation potential • Gather customer specifications for the simulation • Create an accurate simulation and description of the value creation **Communicate the value to the customer** • Request for the customer to sign an NDA to prevent information leakage • Present the net present value of the offering to the customer • Describe the value creation mechanism
Tools	**Utilization of tools** • One simulation tool is used to quantify the value creation potential **Format of tools** • Format of the simulation tool is unknown **Functionality of tools** • The tool includes offering- and industry-specific calculation logic to produce end results • The tool simulates the value creation mechanisms and quantifies the net present value of the offering
Challenges	**General challenges** • Managing different sales approaches simultaneously **Salesperson-related challenges** • Not being able to adapt to the value-based selling approach and mentality • Not being able to target the customer's buying process at an early stage • Not being able to build trust with the customer • Not being able to contact customer's higher management • Not being able to convince the customer of the value creation ability **Customer-related challenges** • Lack of trust in the supplier or the salesperson • Unwillingness to cooperate and share resources and information • The customers do not always consider the owners' and end users' benefits resulting in price or cost competition

5.5 Case company E findings

Company E is a large global provider of industrial products and services. The interview data of company E mainly concentrated on the challenges of implementing a value-based selling approach. The quantification-related findings from company E are presented in table 7 in the end of this subchapter.

5.5.1 Quantification process

The market of company E is nearly saturated, leading to most of the selling to focus on existing customers. These customer relationships are mostly long-term in nature. This creates a significant difference in the value-based selling and value quantification process compared to the other case companies. In the case of company E, value-based selling is introduced mainly for creating a new way of selling to the existing customers. According to the data most of the key steps of the quantification process are present, but the process is not conducted in a clear and systematic way. Instead, gaining understanding of the customer's processes and needs is done in continuous meetings with the customers. In these meetings the customers' beliefs are challenged and new ideas to create business impacts are presented. Necessary information is gathered and different tools are used to calculate the impacts on the customer's business, mainly manifesting in the form of cost savings. The quantified results are then communicated, highlighting the impact of the new solution by comparing it with the existing one. Additionally, reference cases are used to reduce the risk of the customer not believing in the value creation potential of company E.

5.5.2 Quantification tools

As mentioned, the quantification of value is conducted by using calculator tools. The interview data revealed that as its main value quantification tool company E utilizes web-based software. The software requires several inputs including customer information and specifications regarding the offering and the usage situation. Based on the input information, the tool calculates the value created to the customer. In addition to the main quantification tool, the salespeople of company E also rely on individual Excel-based calculator tools, which enable similar detailed calculations compared to the software tool.

5.5.3 Case challenges

The general challenges of company E mainly pertain to their organization and the industry. First, company E has had an image of being a component manu-

facturer for a long time. This image leads to the customers expecting product selling and salespeople executing it, although the aim of the company is to be considered a supplier of solutions. Adding to this, the data suggests that the systems within company E do not support value-based selling sufficiently. For example, the quantification tool does not allow for visually presenting the results to customers, decreasing its practicality. Furthermore, the company is not competing with low end products, leading to the problem of either selling higher than necessary quality or restricting customer selection. The standards and policies of customers can cause them to purchase components that last for only a fifth of the company E's product's lifecycle. Changing these policies is difficult and time consuming, and can hinder the value-based selling effort.

According to the interview data, some of the salespeople do not believe in value-based selling and consider it to be a trend. These people have proven to be difficult to convert from their traditional ways of selling. Still, even if the salesperson is up for implementing the value-based sales approach, the interview data confirms that they are faced with the following challenges. Value-based selling requires new skills and competencies from the salespeople. A salesperson needs to gain new customer contacts within the customer organization in order to conduct value research effectively. Late involvement in the customer's buying process can hinder the salesperson's efforts of shifting the customer's focus from prices to value. Additionally, an insufficient introduction to the customer's business and situation is identified to cause problems especially when the salesperson is trying to quantify value, which is by default considered to be hard by the salespeople of company E.

The customer-related challenges also affect the quantification process significantly. Company E sometimes has a situation also identified in the cases of companies A and D where the customer is not the actual end user, leading to them not having the incentive to invest in the quality provided by company E. Two other common challenges are that the customer is not willing to provide data for the quantification or that the customer does not allow company E to systematically document the created value. The customers' fear of leaking important information to their competition was one of the reasons for having these challenges. Additionally, the customers are often acquainted with the costs of company E and use them as the starting point in negotiations. The customers' purchasing orientation is usually very price driven and aims to achieve cost savings in the short run. A short-term focus also leads to the customers not wanting to take the risk of not achieving the promised value in the long run. Some of the customers of company E had claimed value discussion to

often consist of just words. For example, if several suppliers claim to provide the best value in the market, the discussion can easily focus just on prices and costs. According to the data, softer values, such as environmental value or brand value seem to only have an effect when competing offerings are otherwise of equal value.

Table 7 the quantification-related findings from company E

Topic	Quantification-related findings from company E
Process	**Gain understanding of the customer's situation** • Identify relevant opportunities and target the customer's buying process early on • Understand the customer's processes and needs • Challenge the customer's perceptions of value • Gather data and information for quantification **Assess the value creation potential** • Utilize quantification tools to calculate the value creation potential **Communicate the value to the customer** • Present the value creation potential to the customer • Highlight the impact by comparison to the existing solution • Use reference cases to provide further evidence of the value creation ability
Tools	**Utilization of tools** • Several tools are used to calculate the value creation potential **Format of tools** • The main quantification tool is a web-based software • Other individually used quantification tools are Excel-based calculators **Functionality of tools** • Calculators include offering- and industry-specific calculation logic • The tools calculate the value in terms of aggregated cost reductions
Challenges	**General challenges** • Changing the image from a component manufacturer to a solution provider • Systems do not support value-based selling sufficiently • Not competing in other categories than high end solutions **Salesperson-related challenges** • Not being able to identify relevant opportunities • Not being able to target the customer's buying process early on • Not being able to create new contacts within the customer's organization • Lack of understanding of the customer's processes and needs • Not being able to shift the focus from product selling to value-based selling • Seeing value-based selling as a trend or not believing in it **Customer-related challenges** • Focus on short-term costs and prices • Customers' policies and standards restrict the full utilization of the offering • The customers do not always consider the owners' and end users' benefits resulting in price or cost competition • Unwillingness to share information and data • Unwillingness to allow for systematic value documentation

5.6 Case company A - evaluation of the value construct

Thus far value quantification-related findings have been presented from each case company. The evaluation of the validity and measurability of the proposed value construct in the context of company A is conducted in this subchapter, providing the answer to the first research question of this thesis. The subchapter can be divided into three sections. First, the characteristics pertaining to value are identified and thus validated in the context of company A. Identifying the characteristics of value in the real life context of the case company is important in order to verify the findings of the literature research. Second, the presence and role of different value elements are evaluated. This section creates understanding of the potential to apply the theoretical value construct to a given company context and also verifies the existence of the proposed elements. Third, the measurability and quantification suitability of the proposed value construct is evaluated based on the findings discussed in the preceding sections.

5.6.1 Characteristics of value

In the literature research customer value was identified to be customer-oriented, subjective, multifaceted, situational, dynamic, varying by time span, and causal by nature. These characteristics were discussed with each of the interviewees.

Customer-orientation
A general agreement was found about value being customer-oriented. This aspect of value is considered to be the underlying reason for conducting value research, as understanding the customer's needs and fulfilling them points out that the objective is to find out how value can be created to the customer. The preferences of the customer dictate what the offering will include.

Subjectivity
The subjective characteristic of value was also identified in the interviews. Interviewee 4 stated that subjectivity causes challenges as the salesperson needs to be able to communicate value to different types of people within the customer's organization. According to interviewee 5 this is one of the reasons why the salesperson needs to identify and address the decision maker as soon as possible.

Multifaceted nature
The multifaceted nature of value was also perceived to exist. During the discussions the interviewees brought up different forms of value such as econom-

ic value, emotional value, and risks. The multifaceted nature of value was confirmed to exist and is discussed further in the evaluation of the value elements.

Situational and dynamic nature
The situational characteristic of value was recognized to influence the sales effort very much as all of the interviewees noted that the specific situation of the customer always determines what kind of value is important to them. Thus the role of value research is seen as essential, as it creates a view of the situation where value is to be created. This fact also speaks about the dynamic nature of value, as the preferred value changes once the situation of the customer changes. Value is thus not just customer type-specific, which leads to the role of the company A value propositions to be mainly supportive. The situational characteristic of value is also seen to affect value perceptions in different markets and cultures. Additionally, interviewee 4 suggested that it is not that easy to sell value to larger companies due to their developed organizational buying, which relates to a changed situation in the markets.

Time span
The time span of value is recognized by the interviewees to vary between short- and long-term. Company A utilizes arguments of creating long-term value due to the fact that total cost of ownership is often used as a sales argument. As the offerings of company A have a long life span, most of the value is not manifested in the short-term but rather during a longer period of time.

Causality and interconnectedness
The causality and interconnected nature of value is also mentioned specifically. Interviewee 3 points out that in quantification these aspects of value can create a challenge, as so many factors can influence the certain value that the salesperson is trying to quantify. This can make quantifying the value created through improving the customer's brand image, for example, very difficult.

Conclusions over the characteristics
To conclude, all of the characteristics of value were identified to exist. Each of the characteristics is also relevant in the business of company A. This replicates the findings of the literature research concerning the nature of value. Next, the presence and role of each of the value elements in the proposed value construct are explored in the context of company A.

5.6.2 Presence and role of the value elements

The multifaceted nature of value was identified to exist in company A's business by the interviewees. Next, the roles of the identified value elements are

discussed and the elements are divided into economically measurable elements and value placeholder elements. Economically measurable elements enable for the value to be aggregated through the four aggregation metrics used by company A. Value placeholders might also be quantifiable, but translating their effects in monetary terms might be very difficult, and thus not sensible or beneficial (Anderson and Narus, 1998).

Economic value elements and risks

The economic value elements are partially identified to exist in company A's business. All of the interviewees state that affecting the total costs of ownership or the lifecycle costs of the offering are a major aspect of delivering value. Company A sets a higher than average price in most of its markets, and thus the price of the offering is just an unfavourable starting point. Most of the economic value is created through affecting long-term costs through carefully designing the original solution and providing effective long haul maintenance. As costs constitute one of the four aggregation metrics of company A, they are considered an economically measurable element.

The resale value of the materials or products delivered to the customer were not identified to be relevant in the case of company A's business. This might be due to the fact that company A's offerings do not include many items that could be held in inventory by the customer, but the offering is rather integrated to the larger project of the customer. Despite the fact that the element is not used in selling at company A, it is still identified as an economically measurable element, as the market prices for the components can be used to calculate their monetary value. Thus, all of the economic value elements are considered as economically measurable elements.

Risks play an important role in company A's business, as risks were identified by several interviewees and reducing risks in the customer's business constitutes the fourth aggregation metric of company A. Reducing risks was considered to have a large role in selling. Safety-related improvements are much appreciated in the industry of company A, and thus offer an appealing argument for sales. Additionally, the decision maker might feel responsible for the safety of the employees working in the project, improving the role of risk reduction. However, having discussion over people- and safety-related risks was experienced as a negative approach by some of the interviewees. They suggest rather focusing on the quality-related aspects of the offering.

In addition to the safety-related risks, also the business-related risks were identified to carry an impact in argumentation. Any factor decreasing the customer's financial risks is generally considered important in the markets.

The quantification of risk reduction can be conducted for example by using reference cases. As risks are unwanted uncertainties, effects on them can be hard to calculate beforehand. Instead, previous improvements in unplanned downtime, repairs per year, or Lost Workday Injury Frequency (LWIF) can be quantified and presented to the customer. However, risks that don't directly affect costs, rates, or time might be too ambiguous to quantify and might be better to present in qualitative form. Amongst these could be for example opportunity costs of the relationship (Blois, 2004) or reputation risk. Thus, risks include both economically measurable elements and value placeholder elements, depending on which value element group the risk relates to.

Product- and service-related value elements

The product- and service-related value is considered to be very relevant for company A. Many interviewees argued that the quality of company A's products and services, including reliability, robustness, and functionality for example, is a major factor through which company A provides value to their customers and differentiates from their competition. Additionally, they provide customized offerings to increase the conformance to the customer's needs. Fast, responsive, and flexible deliveries and service provision are also offered to customers on a daily basis.

The elements of product quality, conformance, and supply always relate to a concrete, tangible artefact that is used in the processes of customers. These elements affect the customer's process performance in a forecastable way, meaning that their impact can be economically measurable. Similarly, the service conformance and delivery elements affect many measurable aspects of customers' processes, and can also be considered as economically measurable elements. However, as services are intangible (Vandermerwe and Rada, 1988) and highly interactive (Heinonen, 2004), measuring the service quality can provide a significant challenge. Services have to be performed separately, and just like risks, the quality cannot be measured beforehand. Content-wise conformance and delivery are exceptions as they are agreed upon in the contract. However, the quality-related benefits of services can be presented in terms of customer experience and satisfaction in reference cases. The customer's experiences can be surveyed and presented in a quantitative or qualitative form. Thus, service quality is considered a value placeholder element.

Process-related value elements

In cases where company A gets involved in an early phase of a customer project, the process modification-related value elements are also utilized to provide value. As company A possesses vast amounts of expertise, it can provide

the customer insight and support in designing the project. These design modifications can ultimately lead to increased revenues and considerable cost savings. Additionally, benefits can be created through process integration when company A is able to participate in the execution of the project. The interviewees explained that they help the customer to make sure that all necessary details are ready and completed before the offering is delivered, increasing the efficiency of the process and reducing wasted time. The company contact person even mentioned that a frame agreement with a large customer was created due to the fact that company A had been able improve the customer's methods of designing their projects. The only element that did not rise from the discussions was the outsourcing of processes. This might be caused by the fact that as company A is providing the given part of a customer's project, delivering the offering could be considered as an outsourced process, because the customer could do the entire project without external help. However, it is perhaps considered as an industry standard to outsource the given process.

As mentioned, modification and outsourcing of processes can create vast benefits regarding the time to execute a process, material usage, and other measurable variables that create costs, they can be considered as economically measurable elements. Additionally, improving processes can also lead to reductions in capital usage and increases in revenues. Although improvements in process integration can be quantified in the case of certain tasks being eliminated through better integration, the element entails many variables and human factors affecting the credibility of the quantification. Integration relies heavily on developing communication and improving the process design to fit one another better. However, process design falls under the process modification element, and communication between people and processes is hard to measure or predict because of its intangibility, even if the supplier would have a deep understanding of the customer's processes. Therefore, process integration is proposed to be a value placeholder element. Its quantification could be done through presenting examples from reference cases similar to the customer's situation.

Cooperation-related value elements

The cooperation-related efficiency is identified and to some extent utilized in company A's operations. Many interviewees stated that these elements are not utilized to their maximum potential. The straightforward and effective cooperation is promoted but could be used more often in selling according to interviewees 1, 2, and 4, as the easy cooperation with company A is appreciated among different customers in the industry.

The only motivation-related sales arguments have to do with promoting the nice and easy-going personnel of company A. Otherwise this element is not seen as relevant for doing business with company A's customers. According to interviewee 5 personal relationships are not necessarily needed, because in addition to possibly making cooperation easier, they might lead the customer to demand for better services and more resources from company A.

The third and final cooperation-related element was identified by many interviewees. The value created through market signals is mainly created by the customers using company A as their reference. The good image of company A is recognized in several markets according to the interviewees. However, market signals are typically not used as a sales argument. Instead, the brand and reference value of company A is mainly identified by the customer if it is important or relevant to them. The importance of the image of company A is said to be more important in some markets than others.

The cooperation-related elements suffer from the same quantification-related issues as process integration, namely predictability and measurability. Efficiency can in some cases be quantified in terms of time savings but it is hard to predict how well the two organizations are going to work together. The motivation element is highly related to individuals and their feelings, and quantifying its benefits convincingly can provide a challenge. The effects of market signals can vary depending on firm and market, and are also unpredictable. Thus, the cooperation-related value elements are counted as value placeholders, and should be communicated through reference cases.

Strategic value elements

The strategic value elements are often not present in company A's business. The most identified value element is the partnership element, relating to the long-term benefits and continuity of cooperation. According to the interviews, the strategically important customers might enjoy value created through the strategic elements. However, the business of company A mainly focuses on creating operational value to the customer. This is due to the nature of their offering and the part of the customer's value chain they are focusing on. Partnerships and shared strategic goals are rare but in some cases value creation through partnership is used as a sales argument. According to interviewee 4 the sales arguments are increasingly focusing on the long-term value creation through service delivery, and in this sense, strategic value is created and used in selling. Thus, the continuity element of value can be considered to be present as an economically measurable element, as quantifying it requires the accumulation of other benefits in the long run. Additionally, trust is identified

as a significant part of doing business and is also seen as a prerequisite to lasting cooperation and efficiency. In addition to being a partnership-related value element, trust also affects the entire outcome of the quantification process and multiple aspects of the cooperation between the two companies.

The capability-related value elements are mainly seen as irrelevant for the business of company A. As an exception, the innovation potential of company A is used in some instances regarding processes and new solutions. Interviewees 1 and 4 both state that the innovation potential of company A might be underutilized in selling. Otherwise, as the company contact person mentioned, company A can influence the processes of designing the customer's projects, implying that the capabilities can be developed through the relationship. However, as none of the interviewees identified this method of value creation, the occasions where it can be utilized must be so rare that it is seen as more of an exception than standard case among salespeople. In conclusion, company A might have the ability to produce strategic value through developing capabilities of the customer, but the method of value creation is not used in most of the projects company A is involved in.

Finally, the resource access-related value is partially identified by one of the interviewees. Interviewee 1 explained that information is collected from the equipment base and can be integrated also to the customer's systems, providing valuable information and creating a switching cost for the customer. Nevertheless, it is apparently not commonly used as a sales argument as it was not mentioned by the other interviewees.

All of the value elements in the strategic value dimension, apart from the continuity element, can be considered as value placeholders. These elements create value through longer causal linkages, meaning that the resulting end benefits are not easily linked back to the individual elements. For this reason, aggregating them to the calculated end benefits might confuse the customer and decrease the credibility of the quantification. The resource access-related benefits might be the easiest to quantify as they can include tangible resources that allow for performance measurements. As capabilities are complicated mixtures of skills and knowledge which the company executes through its processes to utilize its resources (Day, 1994), assessing the capability-related benefits might lead the supplier to a dead end or require too much time and effort for the quantification to be useful. Trust is intangible and hard to measure, and shared goals might convince the customer of the supplier's good intentions, but the actual benefits are manifested in the other elements of value.

Conclusions over the value elements

In conclusion, most of the value elements of the proposed value construct were identified and utilized in the sales efforts of company A. As company A's business involves mostly dealing with the operational aspects of their customers, the emphasis of value creation is clearly put on the operational value elements. Economic sacrifices and risks are considered to be extremely important in communicating value to the customers. The long-term lifespan of the benefits is also important in communicating the superiority of company A's offering. Additionally, more concrete elements such as product-, service-, and process-related elements are continuously utilized in value-based selling. Efficient co-operation and market signals are also used but mainly as side notes. Motivation, trust, shared goals, and other strategic value-related elements are not continuously used in selling. The reasons might include the difficulty to quantify the elements due to their nature and the characteristics of company A's business.

Furthermore, many of the interviewees stated that in a practical sales context the role of so called soft value, or value placeholders, is often much less important than the role of monetary value or the value manifested through the four aggregation metrics utilized by company A. This is also supported by the literature stating that value should be communicated to the customer in monetary terms (Anderson and Narus, 1998; Day, 1999). One of the reasons for this is explained by interviewee 5, stating that soft value is not something that can create differentiation to competition, as many companies are seen to have the ability to produce soft value. It is thus seen as more effective to compete by differentiation and present impacts on the metrics that have undeniable influence in the customer's business. This is why value placeholder elements are never sufficient by themselves but need to be accompanied by economically measurable elements of value.

5.6.3 Measurability of the value construct

Thus far we have concluded that all the characteristics and most of the elements of the proposed value construct are present in company A's value-based selling. However, the utilization of the value element as sales arguments varies significantly. Additionally, all of the value elements are not used for quantification purposes due to their complex causal links to the value aggregation metrics used by company A.

It is evident that the monetary measurement of all the value elements in the proposed value construct is not possible. This makes aggregating the effects of the entire construct impossible. Many of the elements might still be quantified

separately without aggregation and the rest can be presented in qualitative form. However, as the interviews and previous research (Anderson et al., 2006) confirm, only a few salient value elements should be used to communicate value to the customer, leaving little room for value elements whose impact cannot be quantified either in monetary terms or at all.

In this evaluation, all of the value elements would have to be quantifiable for the construct to be considered fully measurable, and thus, perfectly suitable for quantification purposes. The division to economically measurable elements and value placeholder elements as such does not influence the evaluation in a way or another as quantification does not involve just economic value. Whether a value element is economically or otherwise quantifiable depends largely on the nature of the business it is used in. However, due to the fact that most of the strategic value elements seem to be too difficult to use in quantification, the proposed value construct can be considered only partially measurable. It is however debateable whether a value construct that is fully measurable can ever be conceptualized due to the complex nature of value and the value creation processes.

Thus, the first research question is answered in two parts. First, by proposing the value construct in chapter two, and second, by validating and further classifying the elements of the value construct in this subchapter. The economically measurable elements and the value placeholder elements are presented in table 8 on the next page.

Table 8 the categorization of value elements based on their measurability

Value Dimension	Economically measurable elements	Value placeholder elements
Operational value dimension	**Economic** Resale value of assets Price Acquisition costs Operations costs **Product-related** Quality Conformance Supply **Service-related** Conformance Delivery **Process-related** Modification Outsourcing	**Service-related** Quality **Process-related** Integration **Cooperation-related** Efficiency Motivation Market signals
Strategic value dimension	**Partnership-related** Continuity	**Resource access-related** Networks Information Other resources **Capability-related** Acquiring capabilities Developing capabilities Innovation **Partnership-related** Trust Shared goals

6. Synthesis of the Findings

The purpose of this chapter is to provide a synthesis of the quantification-related cross case findings and the findings of the literature research, and thus answer the second research question. Implementing the proposed value construct in value quantification is also discussed. Findings relating to specific industries or managing and training the salesforce are left outside the scope of this chapter as the focus is on the key findings concerning how value should be quantified.

The quantification process is divided into three distinct parts; gaining customer understanding, assessing the value creation potential, and communicating value to the customer. The key research findings concerning value quantification are discussed in each part, including different key steps, tools, and challenges, together with their possible resolutions. The quantification process is presented in figure 6 in the end of this chapter.

6.1 Gaining customer understanding

The first part of quantifying value relates to the value research process described in the literature. Due to the various characteristics of value, in order to maximize the case-specific value creation potential, the supplier needs to first gain an understanding of the customer's situation and business processes to uncover needs. This part of the quantification process integrates the means-ends approach to utilizing the proposed value construct, which by itself is a benefits/sacrifices ratio model.

Identify opportunities and get involved early
The literature and findings from the case companies confirm that in order to conduct successful value-based selling and value quantification, the supplier needs to first identify the relevant opportunities and be able to target the customer's buying process at an early stage. Successfully executing these steps creates the necessary conditions for focusing the discussion with the customer on value creation. Relevant opportunities are those that enable sufficient time to build trust, conduct value research, and quantify the value, and are also will-

ing to discuss changes in their current operations. Identifying relevant opportunities requires the supplier to conduct background research on potential customers.

If the steps are not executed properly, the customer's requirements and focus might be already determined, decreasing the supplier's possibilities to influence them. Additionally, the supplier might have to deal with a less preferable stakeholder of a project, if the buying process is targeted too late. Not having sufficient time to build trust, conduct value research, and quantify value decreases the effectiveness and credibility of value-based selling. Furthermore, resources are often wasted in cases where a customer cannot be convinced to consider other than traditional products and services. In many of the case companies these issues have led to the suppliers competing with prices rather than value, which is always an unwanted situation in value-based selling as the supplier is not able to differentiate from its competition in other ways.

Developing tools that provide information on customer types can help the salesperson in identifying relevant opportunities for value-based selling and value quantification. A tool like this can also help to identify the current stage of the buying process by including the customer type's typical buying process descriptions.

Focus on high-level decision influencers

Identifying the high-level decision influencers is an equally relevant step that should be executed as soon as possible. In addition to identifying the actual decision makers, it is beneficial to map the other individuals who are capable of influencing the decision making. High-level managers and decision makers have access to resources within the customer organization together with power to make decisions and influence others. Successfully targeting these individuals can further support focusing the discussion on business impacts and increase the quality of the quantification effort through enabling resources from the customer's side. The importance of focusing the sales effort high enough in the management hierarchy is identified in the literature and confirmed by all of the case companies.

Several challenges can occur if this step is not carried out. Important information and data required for making credible calculations can be withheld from the supplier. Additionally, lower level managers might not be able or willing to assign resources to support the quantification effort. Thus, in the worst case, dealing with the wrong person from the customer organization can hinder the entire process of understanding the customer's situation and business.

Understand the business and align the offering

Understanding the customer's business and their situation is a prerequisite for effectively quantifying and selling value. It is identified in the literature and all the case companies to be a key step of the quantification process. If the previously discussed steps of the quantification process are conducted appropriately, understanding the customer's processes, problems, and ultimately also needs becomes much easier. Mutual trust and the customer's interest to discuss business improvements can lead to better availability and sharing of information about the business. This makes it easier for the supplier to identify improvement opportunities where applying the supplier's offering could potentially create value. At this point the supplier should also strive to challenge the value perceptions of the customer in order to influence them, making their own offering most desirable in the eyes of the customer.

Executing this step of the process is however challenging as it requires a lot of skills from the salesperson. First, the salesperson needs to have a good understanding of the value creation potential of the own offering to be able to adjust it according to the customer's given situation. Second, the salesperson needs to have the ability to focus on relevant topics and create a deep understanding of the customer's business and situation. Third, the salesperson needs to be able to build trust and promote cooperation when in contact with the customer. These skills are not possessed by all salespeople, thus creating a challenge. Using practical training and supporting sales material can help the salespeople in developing these skills.

Identify salient value elements and quantification metrics

The research findings suggest that identifying the salient value elements is essential in quantifying value. Identifying these elements is equal to identifying the most relevant needs of the customer. Being able to address those needs can lead to effective argumentation in selling. In order to be most effective, the salient value elements should preferably be those that differentiate the supplier from its competition.

Additionally, the metrics that are used to quantify economic value need to be identified in order to present the quantification results in the form that is preferred by the customer. The findings of the research suggest that the end metrics should be selected according to the customer's preferences from the central elements of profitability, namely revenue increases, cost reductions, reductions of tied capital (Kaario et al., 2003), increases in rates, or improvements in the sales margin (Iloranta and Pajunen-Muhonen, 2008). Risk reductions can also be used as a measurable outcome (Töytäri and Rajala, 2014).

The inability to identify the salient value elements or preferred metrics to quantify the value can cause the sales effort to address needs that are not apparent in the customer's situation. It is highly unlikely for the customer to be interested in the quantified end benefits if they do not match what the customer perceives as beneficial. The inability to identify salient value elements or the aggregation metrics can be caused by not executing the previous step of the process properly.

Gather information and data
The last step of gaining customer understanding is gathering relevant information and data from the customer. Codifying customer information from the beginning of the process is important, but once trust and relevant connections within the customer organization are established and the own offering is aligned, the salesperson is able to request for specific information or data that is needed for quantifying the value in a credible and realistic manner.

The research findings also confirm that making comparison to the baseline situation of the customer is useful in highlighting the impact of the offering. Thus, detailed information and data are also needed for describing the baseline situation for comparison. The findings also suggest that making comparison to competition is beneficial, and so, information about the competition should also be gathered. If trust has been established, the customer can also act as a source for competition-related information.

The lack of information can have significant impacts on the ability to quantify value. The findings suggest that having a data light-assumption heavy quantification model can make the customer sceptical about the calculations, reducing their credibility significantly. Additionally, an unclear baseline situation is identified as a challenge for successfully conducting value quantification.

6.2 Assessing the value creation potential

Once a clear understanding of the customer is achieved, the supplier needs to make an assessment of the value creation potential of the offering. This part of the quantification process relates mostly to conducting the calculations, thus also requiring discussion over the application of the proposed value construct.

Fill information gaps
As value calculations can include several inputs, the data gathered from customers might not always be sufficient. The lack of data needs to be replaced by using assumptions. The findings of the research state that the assumptions

need to be clear and justifiable in order for them to not have a negative effect on the credibility of the calculations. The assumptions can include industry averages, indexes, and other information that is openly available.

Adjust calculation logic

The salient value elements identified in the previous part of the process have to be linked to the chosen aggregation metrics. Linking the elements to the metrics can be done designing the calculation logic. The findings of the research indicate that the calculation logic used in the value quantification tools is very industry- and offering-specific, and needs to be designed accordingly. This means that different offerings create value in different ways. As value is customer-oriented and situation-specific, the situation of the customer is taken in consideration by using the customer-specific data that is gathered in the first part of the quantification process. However, calculating value can also require customer-specific adjustments to the calculation logic. The calculation logic and tools need to be ready for use when the supplier is executing the quantification process. Designing them by applying the proposed value construct is discussed next.

As the value calculations are offering-specific, the supplier can use the proposed value construct to help design the value calculation logic. As all the elements of the construct are not necessarily present in the value creation mechanisms of a given offering, the supplier can first identify the most relevant elements and translate them in the context of their offering. Once the relevant value elements and the mechanism of how they create value are established, the calculation logic for quantifying and aggregating value can be designed.

The division of the value construct to economically measurable elements and value placeholder elements is useful when their role in the calculation logic is considered. The economically measurable elements are easier to link to the value aggregation metrics. The value placeholder elements, on the other hand, should not be linked to the aggregation metrics without proper justification. The value placeholder elements should be further divided into quantifiable and non-quantifiable elements based on the context they are applied in.

The calculation logic and equations should preferably be implemented in a quantification tool. The use of quantification tools is identified as a key factor in helping salespeople in their quantification effort. Having multiple or complex tools can create challenges regarding their use. Thus, this research recommends implementing a single tool with a user-friendly interface to be designed. Training and support in using the tool must be provided in order to avoid unsuccessful implementation and ineffective use of the tool.

Calculate the value creation potential
When the calculation logic regarding the specific customer and aligned offering is ready, the quantification tool can be used to calculate the value creation potential by feeding the necessary data and variables for the calculations. Quantifying value is considerably difficult and complex, and thus, should be done with the help of a tool rather than being conducted individually by each salesperson. The lack of calculative skills is identified to affect the possibilities of individuals making value quantification. Thus, not having any tools can create significant challenges for the supplier.

Aggregate the economic value
Once the value creation potential of the offering is calculated, the economic value can be aggregated in the chosen elements of profitability, as mentioned before. Dividing the value elements into economically measurable elements and value placeholder elements helps identifying which value elements to use in aggregation and which not. Value placeholders should not be aggregated if transferring the quantifiable value into economic value is difficult. Furthermore, the quantification tools can be designed to present both separate and aggregated value, integrating this step of the process into the tool.

6.3 Communicating value to the customer

Once the supplier has assessed the value creation potential and business impacts, they are ready to provide the evidence concerning their value creation ability. This part of the quantification process is critical as it includes making the actual sales arguments that might win the deal for the supplier.

Communicate value continuously
The research findings suggest that value should be communicated from the beginning to the end of the quantification process in order to convince the customer of the value creation focus of the supplier. However, once the value creation potential is calculated and the economic value is aggregated, the results should be presented to the customer to provide tangible evidence of the business impacts that can be achieved. The findings of the research suggest that no more than a handful of the most important benefits should be communicated to avoid information overflow. Although the benefits should be communicated separately, the aggregation metrics need to be used to provide concrete measures for the value creation potential. It is important to provide the customer with the big picture of how the value would be created, as it enables them to see how their specific situation has been taken into consideration. The

findings recommend leaving a copy of the quantification results for the customer to sell the supplier's offering internally. If the results include sensitive information about the value creation mechanisms or the supplier, the customer can be required to sign a non-disclosure agreement to view the results.

Validate the quantified results
When the value creation potential is presented to the customer, the calculation logic and the information used in the calculations should be validated together with the customer. By validating the calculations and results, the customer can participate in the quantification exercise and get a more detailed understanding of the value creation mechanisms. If the quantification process has been executed properly step by step, the customer should already have a good idea of how the supplier is intending to create the value. However, if the quantifications are not validated or the customer is not adequately committed to the quantification process, the customer might not be convinced of the value creation potential and the quantification can turn out to be a waste of resources.

Compare results to baseline and competition
The findings of the research support the fact that quantified results should be compared to the baseline situation, the competitors' offerings, or both. Comparing the quantified value can highlight the business impact and make the benefits more tangible. When comparing with the competitors offerings, it is beneficial to focus the discussion on the most differentiating salient value elements.

Provide evidence through reference cases
Reference cases can be used in any part of the process when communicating value. The utilization of reference cases is highly recommendable as they can provide evidence that is undeniable. They can be used in the beginning of the quantification process to make the customer interested in the supplier's offering, but they can also be used in the end of the quantification process to provide further evidence of the value creation ability of the supplier. Using reference cases requires systematic documentation of the delivered value in past cases. In the worst case collecting reference case data can be prevented by customers who are not willing to share the information with the supplier.

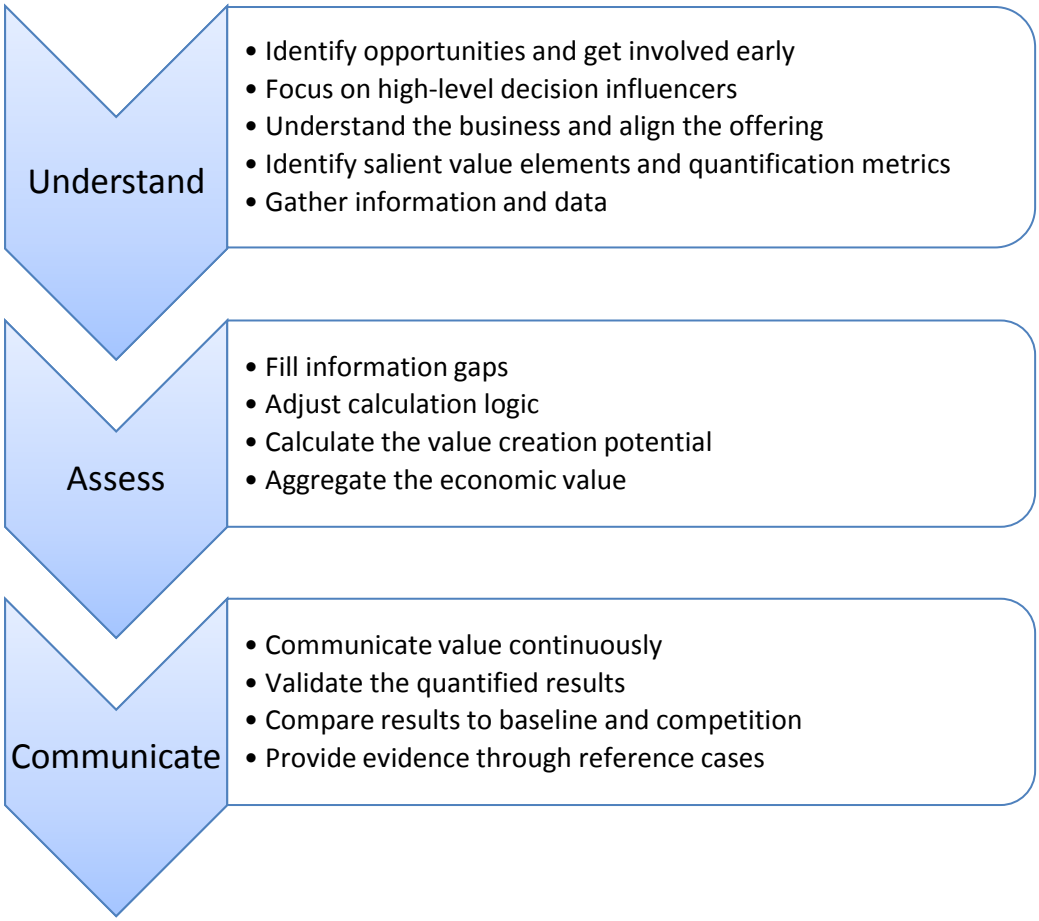

Figure 6 the quantification process based on the findings of the research

7. Discussion and Conclusions

7.1 Summary of the research

This thesis has studied the conceptualization and quantification of value in the context of industrial business-to-business selling. The objective of the research was to explore how customer value should be quantified in industrial selling and to conceptualize value as a measurable construct to make it suitable for quantification purposes. In order to provide the answer to the objective, it was broken down to two research questions:

1. How should customer value be defined and conceptualized for it to be a measurable construct in industrial selling?

2. How should customer value be quantified in industrial selling?

Answering the research questions required first studying customer value and value quantification in academic literature. The previous literature on value was studied in chapter two, followed by the creation of a new value construct that integrates previous conceptualizations of value. In chapter three the context of value creation, selling, and quantification were studied in order to, first, gain understanding for applying the value construct into practice, and second, to provide initial findings on how value should be quantified in business markets.

A qualitative research was conducted to replicate the findings concerning how value should be quantified, and to evaluate the validity and measurability of the proposed value construct in a practical quantification context. Using a multiple case study approach provided many practical insights and helped in creating a better understanding of the challenges and methods of value quantification.

The quantification-related individual case findings were discussed in chapter five together with the evaluation of the proposed value construct. Thus, the first research question is answered in two parts, first by presenting the value

construct in chapter two, and second, by evaluating the validity and measurability of the value construct in chapter five.

Chapter six provided the answer to the second research question by synthesizing the findings of the literature research with the individual case findings to describe how value should be quantified in industrial selling. Applying the proposed value construct in value quantification was also discussed. The findings of the research are generalizable in an industrial sales context as only the most replicated findings were used in describing the quantification process.

The interview findings from case company A were also used to support designing a quantitative formal survey for further testing the validity of the proposed value construct. The survey design is discussed in the end of chapter four, and the actual survey is presented in different languages in appendices 3 and 4.

7.2 Theoretical implications

The concept of value and its role in business-to-business selling have been increasingly studied in the last two decades (Eggert and Ulaga, 2002; Ravald and Grönroos, 1996; Terho et al., 2012; Walter et al., 2001). The literature on customer value includes multiple definitions and conceptualizations that would not be suitable for value quantification in business-to-business selling (Smith & Colgate 2007). The proposed conceptualization addresses this research gap by providing a value construct that integrates multiple value constructs arising from the past literature, providing a clear set of quantifiable dimensions and elements. Additionally, the thesis qualitatively evaluates the validity and measurability of the value construct and classifies the elements into economically measurable elements and value placeholder elements in order to support the practical implementation of the construct. These findings create new theoretical knowledge by combining past theories and practical case study data. Furthermore, a quantitative survey is designed for a more thorough validation of the value construct, providing avenues for further research.

The value-based selling approach has also been under a lot of research during the last years (Töytäri et al. 2011; Töytäri & Rajala 2014). However, the value quantification literature does not include many definitions of how value should be quantified. To address this issue, this thesis provides a description of how value quantification should be conducted in industrial selling by combining the previous literature with the findings from several case companies.

7.3 Managerial implications

The replicated findings and the conceptualized value construct can help companies in designing their quantification process and developing their quantification tools regardless of the offering or industry.

The thesis provides managers implementing a value-based sales approach with the answer to how value should be quantified in industrial selling. The process description takes into consideration the multitude of steps from identifying opportunities to finally communicating the value to the customer.

In addition to companies being able to adopt the described value quantification process in their selling, the thesis also provides findings concerning the relevant challenges of quantifying value. The challenges of value quantification are assigned to the steps of the quantification process they mostly relate to, making it easier for managers to address them when adopting a value quantification process.

Ideas about how to design the tools and how to apply the proposed value construct in practical calculations are also provided. The proposed value construct is designed to be customizable for the use of any industrial company, and thus works as a valuable framework for managers to systematically map the varying value creation mechanisms of their company's offerings. The construct also gives guidance to the organizations about which business impacts to quantify in monetary terms and which to present qualitatively or separately to ensure the credibility and usefulness of the quantified value.

7.4 Limitations of the study

The main limitations regarding the quality of the study relate to the data collection methods. First, although the study utilized five case companies in addition to a literature review, only one of the case companies was thoroughly studied by using multiple interviews and other sources of evidence. As the data from case company A included data from six interviews, three group sessions, documents, and several meetings with the company representatives, the analysis of the case could be conducted in detail. However, companies B, C, and D only included one group session for each company, including free discussion about the research subjects. This data collection method resulted in several shortages of information concerning the subjects. Additionally, case company E data was received from another research with a slightly differing focus, leading to little findings to be gained on some of the topics. Despite the issues mentioned here, the findings from each of the case company were still quite

similar, leading to the generalizability of the findings of this research. It is thus questionable whether additional collection of data would have improved the quality of the research or spawned any additional findings from the research.

Additionally, the ideal way to validate the proposed value construct would have been through a quantitative research, as mentioned in the methodology of this thesis. Evaluating the construct in the context of a single case company can give some light to the constructs validity, but further research on the subject is needed.

Finally, the case companies set additional limitations to the research. First, only Finnish representatives participated in the group sessions. A foreign representative might have had different culture-related views on some of the topics. Second, the case companies are all large industrial companies, limiting the generalizability of the findings within that dome.

7.5 Avenues for further research

This thesis has proposed how value should be quantified in industrial selling and provided a value construct that can be applied for designing the calculation logic for any given offering of an industrial company. Additionally, the thesis provides some discussion on how the different elements of the value construct could be measured and what kind of specific value could be created through them. However, this thesis does not study the detailed ways of operationalizing the elements of the value construct due to the fact that measuring the value created through a given element is offering-specific, leading to various measures for each value element to exist. Thus, studying the detailed operationalization would not fit the scope of this thesis, but does provide an avenue for further research.

To conclude, the survey proposed by this thesis enables the further research on validating the value construct conceptualized in the current research. This thesis recommends for the quantitative validation to be conducted before further studies concerning the value construct. Additionally, this thesis calls for further research on how to operationalize the value construct in various industries. The research could possibly identify common measurements for value elements and provide a more detailed guide for designing the calculation logic for value quantification of any given offering.

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Appendix 1 Interview Structure in Finnish

Johdanto (10 min)
Lyhyt johdanto toteutetaan haastattelun alussa. Haastateltavalle esitellään haastattelijan tausta sekä tutkimuksen lähtökohdat ja konteksti. Tämän jälkeen haastattelun rakenne käydään myös läpi. Lupa nauhoittaa haastattelu kysytään tässä vaiheessa.

Haastattelu (50 - 70 min)
Haastattelu alkaa pyytämällä haastateltavaa esittelemään hänen taustaansa ja kokemuksiaan arvon myyntiin liittyen. Tästä eteenpäin haastattelun fokus pidetään määriteltyjen aiheiden rajoissa. Aiheista keskustellaan alla esitettävässä järjestyksessä avoimin kysymyksin. Muutokset järjestyksessä sallitaan.

Asiakasarvon kartoitus ja kommunikointi

Keskustelun tulisi vastata siihen, minkä tyyppinen arvo on yleisesti asiakkaille kaikista tärkeintä, miten se saadaan selville tilannekohtaisesti ja miten se kommunikoidaan. Aihe sisältää keskustelua siihen liittyvistä menetelmistä, työkaluista sekä haasteista.

Asiakasarvon laskeminen

Keskustelun tulisi vastata siihen, millä keinoin arvoa lasketaan ja laskelmia hyödynnetään käytännössä kohdeyrityksessä. Aihe sisältää keskustelua siihen liittyvistä menetelmistä, työkaluista sekä haasteista.

Arvon suhteellisuus ja muutos myynnissä

Keskustelun tulisi vastata siihen, kuinka tilanneriippuvaista (Maantieteellinen sijainti, kulttuuri, kilpailutilanne, pitkä tai lyhyt aikaväli, yksilölliset päätöksentekijät) arvo on ja miten myynnin tulisi ottaa se käytännössä huomioon.

Operatiivinen arvo

Keskustelun tulisi vastata siihen, mitä operatiivisen arvon osatekijöitä kohdeyrityksen asiakkaat suosivat ja kuinka niihin vedotaan myynnissä.

Strateginen arvo

Keskustelun tulisi vastata siihen, mitä strategisen arvon osatekijöitä kohdeyrityksen asiakkaat suosivat ja kuinka niihin vedotaan myynnissä.

Arvon myyminen käytännössä kohdeyrityksessä

Keskustelun tulisi vastata siihen, kuinka arvonmyynti on myyjien näkemyksen mukaan toiminut kohdeyrityksessä ja kuinka sitä tulisi kehittää tulevaisuudessa. Keskustelua käydään myös arvonmyynnin vahvuuksista ja heikkouksista.

Appendix 2 Interview Structure in English

Introduction (10 min)
A short introduction is done in the beginning of the interview, including the background of the interviewer and the study, and a summary of the interview structure. The permission to record the interview is also confirmed at this point.

Interview (50 - 70 min)
The discussion is opened by asking the interviewees to explain their background and experience in value-based selling. From here the focus of the interview is kept in the range of the chosen topics. The topics are discussed in the following order by using open questions. Variations in the order of topics are allowed.

Understanding and communicating customer value

The discussion should answer to what kind of value is generally most important to customers, in what way is that discovered in practice, and how is it communicated. The topic includes discussion over the related methods, tools, and challenges.

Value quantification

The discussion should answer to what ways is value quantified in and how are the calculations used in practice. The topic includes discussion over the related methods, tools, and challenges.

The relativity and change of value

The discussion should answer to how situational (geographical location, culture, competition, short vs. long-term, individual decision makers) value is and in what way salespeople should take that in consideration in practice.

Operational value elements

The discussion should answer to which operational value elements the case company's customers find important and how are they utilized in selling.

Strategic value elements

The discussion should answer to which strategic value elements the case company's customers find important and how are they utilized in selling.

Implementation of value-based selling

The discussion should answer to how value-based selling has worked in the case company from the perspectives of the interviewees and how they think it should be developed in the future. The strengths and weaknesses of value-based selling are also discussed.

Appendix 3 Formal Survey in Finnish

Kysely arvoon perustuvasta myynnistä ja arvon laskemisesta

Alkuun

Olet vastaamassa arvon myyntiä ja laskemista koskevaan kyselyyn. Vastaaminen vie noin 10 minuuttia aikaa. Voit seurata kyselyn etenemistä sivun alalaidassa sijaitsevasta mittarista. Paina seuraava-painiketta aloittaaksesi!

Teema 1: Arvoon perustuvan myynnin toteuttamiseen vaikuttavat tekijät

Näiden kysymysten tarkoituksena on kartoittaa arvon osatekijöitä ja niiden väitettyjä vaikutuksia. Kysymyksiin ei ole oikeita tai vääriä vastauksia. Toivomme, että vastaisitte sen perusteella, kuinka hyvin väittämät kuvaavat teidän liiketoimintaanne.

"Kuinka hyvin seuraavat väittämät kuvaavat arvoon perustuvan myynnin toteutumista liiketoiminnassanne?" (1=Täysin eri mieltä, 2=Jokseenkin eri mieltä, 3=En osaa sanoa, 4=Jokseenkin samaa mieltä, 5=Täysin samaa mieltä)

Arvosta myynnissä

Asiakkaamme vakuuttuvat tarjoaman hyödyistä paremmin lukujen avulla kuin sanallisen selityksen perusteella

Arvon esittäminen lukujen avulla konkretisoi hyödyn asiakkaillemme

Operationaalinen arvo

Yrityksemme tuottamat parannukset asiakasyrityksen kustannustehokkuudessa eivät luo arvoa asiakkaillemme

Yrityksemme tuottamat parannukset asiakasyrityksen omiin tuotteisiin tai palveluihin ovat keskeinen arvoa tuottava tekijä asiakkaillemme

Taloudelliset osatekijät

Asiakkaalle toimitettavien tuotteiden jälleenmyyntiarvo ei ole asiakkaidemme mielestä tärkeä tai arvokas asia

Yhteistyöstämme asiakkaalle aiheutuvat kokonaiskustannukset vaikuttavat suuresti asiakkaidemme arvokokemukseen

Riskit

Yhteistyömme myötä syntyvät uudet riskit eivät ole asiakkaidemme kokemaa arvoa heikentävä tekijä

Asiakkaiden riskien vähentäminen on liiketoiminnassamme keskeinen tapa luoda asiakasarvoa

Tuotteet ja palvelut

Yrityksemme laadukkaat tuotteet ja palvelut ovat tärkeä osa parannettaessa asiakkaidemme prosesseissa syntyvää laatua ja luotaessa näin asiakasarvoa

Toimittamamme korkealaatuiset ja helppokäyttöiset tuotteet eivät ole arvon lähde asiakkaillemme

Yrityksemme asiantuntevat ja laadukkaat palvelut ovat tärkeä asiakkaidemme kokeman arvon lähde

Asiakkaillemme tarjottavien tuotteiden ja palveluiden istuvuus heidän tarpeisiinsa on liiketoiminnassamme tärkeä asiakasarvon lähde

Tuotteiden ja palveluiden oikea-aikainen ja luotettava toimitus ei ole liiketoiminnassamme asiakkaiden arvokokemusta parantava tekijä

Tuotteiden ja palveluiden nopea ja joustava toimitus on asiakkaillemme tärkeä arvon lähde liiketoiminnassamme

Prosessit

Asiakasyrityksen prosessien tehostaminen ei ole asiakkaidemme kokemaan arvoon vaikuttava tekijä

Asiakasyrityksen prosesseissa syntyvän laadun parantaminen on tärkeä asiakkaidemme arvokokemukseen vaikuttava tekijä

Asiakasyrityksen prosessien välisen koordinaation parantaminen ei ole osa yrityksemme mahdollisuuksia tuottaa arvoa asiakkaillemme

Yhteistyö

Avoin ilmapiiri ja molemminpuolinen joustavuus yhteisessä työskentelyssä ovat keskeisiä asiakkaidemme kokemaan arvoon vaikuttavia tekijöitä

Päivittäisen yhteistyön tehostaminen ei ole tapa luoda arvoa asiakkaillemme

Yhteistyössämme syntyvät henkilökohtaiset suhteet ja vuorovaikutus motivoivat asiakkaan henkilöstöä ja ovat siten tärkeitä keinoja tuottaa arvoa asiakkaillemme

Yrityksemme hyvä maine luo asiakkaillemme arvoa motivoimalla heidän henkilöstöään

Yrityksemme tai yhteistyöverkostomme hyvä maine vahvistaa asiakkaidemme asemaa markkinoilla täten vaikuttaen heidän arvokokemukseensa

Strateginen arvo

Yrityksemme tuottamat parannukset asiakasyrityksen pitkän aikavälin selviytymiskyvyn eivät ole asiakasarvon lähde liiketoiminnassamme

Resursseihin pääsy

Yhteistyössämme asiakkaalle tarjotut ainutlaatuiset tiedot tai taidot eivät luo asiakasarvoa liiketoiminnassamme

Yhteistyömme kautta asiakkaalle tarjotut ainutlaatuiset resurssit tuottavat asiakkaillemme merkittävää lisäarvoa

Yhteistyömme kautta asiakkaalle tarjotut yrityskontaktit ovat asiakkaillemme tärkeä arvoa luova tekijä

Kyvykkyydet

Asiakasyrityksen kyvykkyyksien kehittäminen tai lisääminen yhteistyömme seurauksena luo asiakkaillemme arvoa

Yhteistyössämme syntyvät innovaatiot eivät ole asiakasarvoa tuottava tekijä

Kumppanuus

Liiketoiminnallemme ei ole ominaista, että pitkäaikainen yhteistyö luo asiakkaillemme enemmän arvoa kuin lyhyen aikavälin transaktiot

Yhteistyössämme saavutettu luottamus ja yhteiset tavoitteet sitouttavat molempia osapuolia ja luovat täten arvoa asiakkaillemme

Teema 2: Arvon laskeminen myynnissä

Tämän teeman tarkoitus on tunnistaa asiakkaan kokeman arvon osatekijöistä ne, joiden laskemista myyjät pitävät tärkeimpänä. Laskemisella tarkoitetaan myynnin yhteydessä asiakkaalle toimitettavan arvon määrittämistä ja esittämistä lukujen avulla. Toivomme jälleen, että vastaatte väittämiin sen perusteella miten ne soveltuvat teidän liiketoimintaanne.

”Kuinka tarpeellista on käyttää apunaan lukuja, kun asiakkaalle esitetään seuraavilla keinoilla saavutettavia hyötyjä?” (1= Täysin tarpeetonta, 2=Osittain tarpeetonta, 3=En osaa sanoa, 4=jokseenkin tarpeellista, 5=Erittäin tarpeellista)

Taloudelliset osatekijät

Asiakkaalle aiheutuvien kokonaiskustannusten vähentäminen ratkaisujemme kautta

Arvon tuottaminen asiakkaalle tarjoamalla heille tuotteita, joilla on korkea jälleenmyyntiarvo

Riskit

Asiakkaan liiketoiminnan riskien vähentäminen yhteistyömme kautta

Tuotteet ja palvelut

Asiakkaan prosesseissa syntyvän laadun parantaminen yrityksemme laadukkaiden tuotteiden ja palvelujen avulla

Asiakkaan prosessien tehokkuuden parantaminen yrityksemme korkealaatuisten tuotteiden ja palveluiden avulla

Asiakkaidemme prosessimuutostarpeen vähentäminen tarjoamalla heille joko räätälöitäviä tuotteita ja palveluita tai useita vaihtoehtoja, joista valita sopivin

Asiakkaamme liiketoiminnan tukeminen toimittamalla heidän tilaamansa tuotteet ja palvelut oikea-aikaisesti ja luotettavasti

Asiakkaamme liiketoiminnan tukeminen tarjoamalla heille joustavuutta tuotteiden ja palveluiden toimituksessa

Prosessit

Asiakkaan prosesseissa syntyvän laadun ja prosessien tehokkuuden parantaminen yhteistyössämme tehtävän prosessikehityksen avulla

Asiakkaan prosessienvälisen koordinaation ja kommunikaation parantaminen yhteistyömme avulla

Yhteistyö

Yhteistyömme tehokkuuden parantaminen avoimen ilmapiirin ja molemminpuolisen joustavuuden avulla

Asiakkaan henkilöstön motivaation ja tuottavuuden parantaminen yhteistyössämme syntyvien henkilökohtaisten suhteiden ja kanssakäymisen kautta

Asiakkaan henkilöstön motivaation ja tuottavuuden parantaminen yrityksemme hyvän maineen avulla

Asiakkaasta markkinoille heijastuvan kuvan parantaminen yrityksemme tai yritysverkostomme hyvän maineen avulla

Resursseihin pääsy

Asiakkaan liiketoiminnan kehittäminen tarjoamalla heille yhteistyössä ainutlaatuisia tietoja ja taitoja

Asiakkaan liiketoiminnan kehittäminen tarjoamalla heille yhteistyössä ainutlaatuisia resursseja

Asiakkaan liiketoiminnan kasvattamisen ja kehittämisen edesauttaminen tarjoamalla heille yhteistyössä yrityskontakteja

Kyvykkyydet

Asiakkaan kilpailuaseman parantaminen kehittämällä tai lisäämällä asiakasorganisaation kyvykkyyksiä yhteistyön avulla

Asiakkaan liiketoiminnan kehittäminen yhteistyössämme syntyvien innovaatioiden avulla

Kumppanuus

Yhteistyön arvonluontipotentiaalin parantaminen siirtämällä yhteistyön fokusta lyhyestä aikavälistä pitkään

Pitkäaikaisen ja laadukkaan yhteistyön edistäminen yhteisten tavoitteiden ja luottamuksen avulla

Appendix 4 Formal Survey in English

Survey concerning value-based selling and value quantification

Beginning the survey

You are about to fill in a survey on value-based selling and value quantification. Answering the survey can take up to 10 minutes. You can follow the progress of the survey from the progress bar at the bottom of the screen. Please press the "next" button to begin the survey!

Theme 1: Factors influencing the practical implementation of value-based selling

The purpose of this theme is to map value elements and their alleged effects. There is no right or wrong answer to any of the questions. We hope that you will base your answers on how well the claims describe selling in your line of business.

"How well do the following claims describe the practical implementation of value-based selling in your line of business?" (1=strongly disagree, 2=slightly disagree, 3=neither disagree nor agree, 4=slightly agree, 5=strongly agree)

Value in selling

Our customers are easier to convince of the offering's benefits by using numbers instead of just verbal arguments

Presenting value by using numbers makes the benefits more concrete to our customers

Operational value

Our improvements in the customer organization's cost efficiency are not sources of value to our customers

Our improvements in the customer organization's own products and services are a central value creating mechanism for our customers

Economic

Our customers do not perceive the resale value of the products delivered to them as important or valuable

The total costs of cooperating with our company influence our customers' value perceptions significantly

Risk-related

New risks created by cooperating with our company do not decrease the value perceived by our customers

Reducing the customer's risks through the cooperation is a central mechanism for improving the customers' value perception in our line of business

Product and service-related

Our high quality products and services are important in improving the quality created in our customers' processes, and this way, also in creating value to our customers

Our high quality products that are easy to use are not a source of value to our customers

Our high quality expert services are an important source of customer value

Offering products and services that conform to the customer's requirements is an important source of customer value in our business

Our timely and reliable delivery of products and services is not an element that improves the value perceived by our customers

The fast and flexible delivery of products and services is an important source of customer value in our business

Process-related

Improving the performance of the customer's processes is not a way of improving the value perceived by our customers

Improving the quality created in the customer's processes is an important mechanism for creating customer value in our business

Improving the coordination between the customer's processes is not a part of creating value to our customers

Cooperation-related

An open atmosphere and mutual flexibility in cooperation are central elements of improving the value perceptions of our customers

Improving the efficiency of the daily cooperation with the customer is not a way of creating customer value in our business

Personal relationships and interaction in the cooperation improve the motivation of the customer's personnel, and are thus important mechanisms of creating value to our customers

Our good reputation creates customer value by motivating the customer's personnel

The good reputation of our company or our business network strengthens the customer's position in the markets, and therefore acts as a way of creating value to our customers

Strategic value

Our improvements in the customer organization's long-term survival ability are not a source of customer value

Resource access-related

Providing our customers with unique knowledge and skills through cooperation is not a way of creating customer value in our business

Providing our customers with unique resources through cooperation creates significant value to them

Providing customers with business contacts is a central mechanism for creating value to our customers

Capabilities

Developing or increasing the customer's capabilities through cooperation creates customer value in our business

Creating innovations in the cooperation is not a part of creating customer value in our business

Partnership

It is not typical for our business that long-term cooperation provides our customers with more value than short-term transactions

Trust and mutual goals create commitment and therefore provide value to our customers

Theme 2: Value quantification in selling

The purpose of this theme is to identify those value elements and dimensions that salespeople consider most important for quantification in selling. In a selling context value quantification means calculating your value creation potential and presenting it to the customer by using numbers. We hope that you will again base your answers on how well they describe selling in your line of business.

"How necessary is the use of calculations, when the following ways of creating benefits are presented to the customer?" (1=very unnecessary, 2=slightly unnecessary, 3=neutral, 4=slightly necessary, 5=very necessary)

Economic

Decreasing the customer's total costs through our cooperation

Creating value to the customer by providing them with products that have a high resale value

Risk-related

Decreasing risks in the customer's business through our cooperation

Product and service-related

Improving the quality created in the customer's processes by offering them high quality products and services

Improving the customer's process efficiency by offering them high quality products and services

Decreasing the customer's need to adapt their processes by offering them either customizable products and services or multiple alternatives to choose from

Positively influencing the customer's daily operations by offering them timely and reliable delivery of products and services

Positively influencing the customer's daily operations by offering them fast and flexible delivery of products and services

Process-related

Improving the customer's process output quality and process performance by offering process development in our cooperation

Improving the coordination and communication between the customer's processes through our cooperation

Cooperation-related

Improving the cooperation efficiency by promoting openness and flexibility in the cooperation

Improving the motivation and productivity of the customer's personnel through personal relationships and interactions in our cooperation

Improving the motivation and productiveness of the customer's personnel through our company's good reputation

Improving the market image of the customer through the good reputation of our company and our business network

Resource access-related

Developing the customer's business by offering them unique skills and knowledge in the cooperation

Developing the customer's business by offering them unique resources in the cooperation

Enabling the customer to better build and develop their business by offering them business contacts in the cooperation

Capability-related

Developing or increasing the customer organization's capabilities through the cooperation

Developing the customer's business through creating innovations in the cooperation

Partnership

Improving the mutual value creation potential through long-term cooperation

Improving the time span and quality of the cooperation through mutual goals and trust